Southern California's Computer Magazine

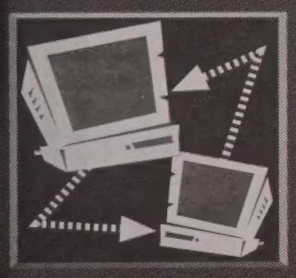
February 6, 1995 • #133

FREE

MicroTimes™

BAM ACCESS TO MARKETS • BAM ACCESS TO MARKETS • BAM MEDIA

New This Issue:



Online Guide Section
- Internet Column
- Online Services Column
- Web Page Listings

In Business Solutions
- Small Office/Home Office Column

Online Services:

Challenges & Opportunities

Tim Oren of CompuServe: "Eventually the Internet will allow one to have a basically free market of specialists, who can attack any particular component of any of our businesses in the online services market. But I don't think you can look at what any of us are doing right now and say that we are failing to understand that message."

MultiMedia & Beyond—

Providing Information And Resources To The Producers & Consumers Of Multimedia. See Inside!

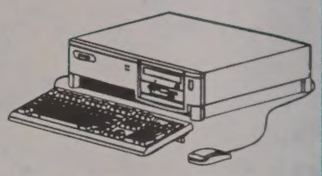
COMPAQ

COMPAQ 486SL 25MHz
CONTURA AERO 4/25 170MB SUPER LIGHT NOTEBOOK

486SL 25MHz CPU • 170MB Hard Drive • 4MB RAM expandable to 12MB
EasyPoint Trackball 76-Key Keyboard • Integrated speaker • MS-DOS 6
Microsoft Windows • WinLink Transfer Utility with cable • Lotus Organizer
TabWorks • Online Documentation • 3 Year Limited Warranty
Model does not include an integrated 3.5" 1.44 MB Floppy Drive
#1890695

$1195

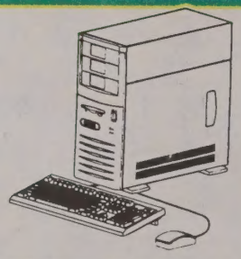
COMPAQ 486SX2 66MHz
PRESARIO 720 CDS MULTIMEDIA SYSTEM



486SX2-66MHz CPU • 420MB Hard Drive • 4MB RAM expandable to 64MB • 1MB VRAM
expandable to 2MB • 3 ISA expansion slots • Dual-Speed Internal CD-ROM
16-Bit Stereo Sound Card • Built-In Speakerphone • Internal Fax/Modem
Preinstalled software: MS DOS 6.2 • MS Windows 3.1 • TabWorks • Quicken • Media Pilot
Welcome Center • MS Encarta CD • MS Works CD • Prodigy • America On-Line
CompuServe • ImagiNation Network • Home Survival Toolkit • Kidsoft CD
The Even More Incredible Machine and more!
Monitor Not Included
#1947056

$1495

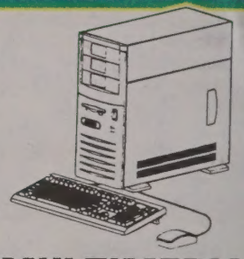
COMPAQ 486SX2 66MHz
PRESARIO 920 CDS MULTIMEDIA MINI TOWER SYSTEM



486SX2-66MHz CPU • 420MB Hard Drive • 8MB RAM expandable to 100MB
1MB VRAM expandable to 2MB • 5 ISA expansion slots • Built-In Speakerphone
14,400 BPS Internal Fax/Modem • Dual-Speed CD-ROM • 16-Bit Sound Card
WAV and MIDI Recorders • **Preinstalled Software:** MS DOS 6.2 • MS Windows 3.1
TabWorks • Quicken • Media Pilot Welcome Center • MS Encarta CD • MS Works CD
Prodigy
America On-Line
CompuServe
ImagiNation Network
Home Survival Toolkit
Kidsoft CD
The Even More
Incredible Machine
and more!
Monitor Not Included
#1947089

$1695

COMPAQ 486SX2 66MHz
PRESARIO 920 CDTV MULTIMEDIA MINI TOWER SYSTEM



486SX2-66MHz CPU • 420MB Hard Drive • 8MB RAM expandable to 100MB
1MB VRAM expandable to 2MB • 5 ISA expansion slots • Built-In Speakerphone
14,400 BPS Internal Fax/Modem • Dual-Speed CD-ROM • 16-Bit Sound Card
WAV and MIDI Recorders • Video and Cable ready TV tuner card • Speakerphone
Telephone Answering Machine with 10 Voice Mail Boxes
Preinstalled Software: MS DOS 6.2 • MS Windows 3.1 TabWorks • Quicken
Media Pilot
Welcome Center
MS Encarta CD
MS Works CD
Prodigy
America On-Line
CompuServe
ImagiNation Network
Home Survival Toolkit
Kidsoft CD
The Even More Incredible Machine
Monitor Not Included
#1947090

$1895

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

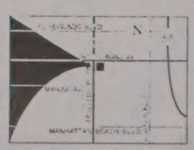
Fry's ELECTRONICS

Prices Good Through February 28,1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY -FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
DISCOVER, VISA AND MASTERCARD ACCEPTED.

The Winter of '95 Won't See Anyone Beat CompuCal's Cooooool PC Prices!

Home/Office Multimedia PC

486DX2/66 VLB

$1394

8 MB RAM ● 420 MB HD
2X CD-ROM ● 16-Bit Sound

- **8 MB** RAM exp. to 128 MB ● 256K cache
- **420 MB** IDE hard drive
- **Double-speed CD-ROM** player, caddyless
- **16-Bit sound card,** stereo spkrs
- 1.44 floppy disk drive, 1.2 MB optional
- 14" .28dp SVGA-NI monitor, 1280x1024
- **Fast VLB video** accelerator, 1 MB
- AT I/O, Mouse, MS-DOS, Windows 3.11

Super-Power Media Station '95

Pentium/90 PCI

$3263

16 MB RAM ● 1080 MB HD
4X CD-ROM ● 17" Flatscreen

- **16 MB** RAM exp. to 128 MB ● 256K cache
- **1080 MB** IDE hard drive
- 1.44 MB floppy disk drive
- **Superfast Quad-speed 4X CD-ROM,** caddyless
- **16-Bit CD-quality sound,** stereo spkrs
- **17" flatscreen,** 1280x1024, .28dp
- **64-Bit PCI video** accelerator, 1 MB
- AT I/O, Mouse, MS-DOS, Windows 3.11

EZ-Priced Basic Workstation

486DX2/66 VLB

$978

4 MB RAM ● 420 MB HD
14" Monitor ● VLB video

- **4 MB** RAM exp. to 128 MB ● 256K cache
- **420 MB** IDE hard drive
- 1.44 floppy disk drive *(1.2 MB optional)*
- 14" .28dp SVGA-NI monitor, 1280x1024
- **Fast VLB video** with 1 MB video RAM
- High-res mouse ● Compact mini-vertical case
- 2 serial, 1 parallel & 1 game ports
- Microsoft DOS 6.22, Windows 3.11

EZ-Priced Windows PC

486DX2/66 VLB

$1197

8 MB RAM ● 540 MB HD
14" Monitor ● VLB video

- **8 MB** RAM exp. to 128 MB ● 256K cache
- **540 MB** IDE hard drive
- 1.44 floppy disk drive *(1.2 MB optional)*
- 14" .28dp SVGA-NI monitor, 1280x1024
- **Fast VLB video** with 1 MB video RAM
- High-res mouse ● Compact mini-vertical case
- 2 serial, 1 parallel & 1 game ports
- Microsoft DOS 6.22, Windows 3.11

Super-Media Windows PC

486DX2/66 VLB

$1624

8 MB RAM ● 540 MB HD
4X Quad-CD ● 16-bit Sound

- **8 MB** RAM exp. to 128 MB ● 256K cache
- **540 MB** IDE hard drive
- **4X Quad-speed CD-ROM** player, caddyless
- **16-Bit sound card,** stereo spkrs
- **15" flatscreen** .28dp, 1280x1024
- **Fast VLB video** with 1 MB video RAM
- 1.44 floppy drive ● Compact mini-vertical case
- AT I/O, Hi-res Mouse, MS-DOS, Windows 3.11

EZ-Priced State-of-the-Art Power!

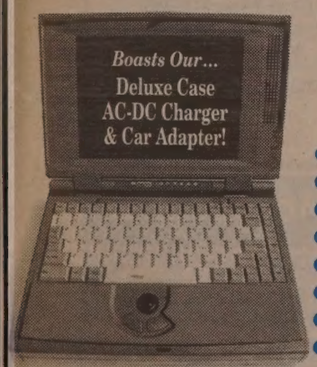
Pentium/90 PCI

$1918

8 MB RAM ● 540 MB HD
15" Flatscreen ● PCI Video

- **8 MB** RAM exp. to 128 MB ● 256K cache
- **540 MB** IDE hard drive with PCI Enh. IDE cont.
- 1.44 floppy disk drive *(1.2 MB optional)*
- **15" flatscreen,** 1280x1024, .28dp
- **Fast 32-bit PCI video** accelerator, 1 MB
- High-res mouse ● Compact mini-vertical case
- 2 serial, 1 parallel & 1 game ports
- Microsoft DOS 6.22, Windows 3.11

Lean, Mean Travel Power!

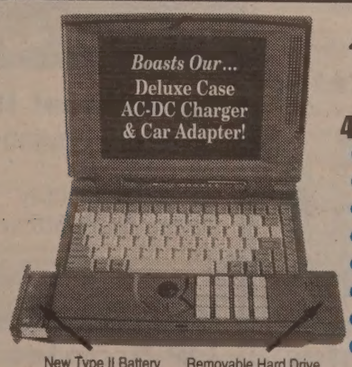


486DX2 66 **$1397**

4 MB RAM ● 260 MB HD ● 9.4" LCD

- **4 MB RAM,** exp. to 20MB
- **260 MB removable** IDE HD *(opt. 540 MB)*
- 1.44 floppy drive ● **Two PCMCIA slots**
- 512K external video-VGA *(upgr. to 1 MB)*
- **Large 9.4" greyscale monocolor LCD**
- Ports: 2 serial, 1 parallel, 1 PS/2 kbd, video
- Built-in **large trackball,** center-mounted
- Microsoft DOS 6.22

FAST Color for the Road!



486DX2 66 **$2298**

4 MB RAM ● 260 MB ● Dual Scan Color!

- **4 MB RAM,** exp. to 20MB
- **260 MB removable** IDE HD *(opt. 540 MB)*
- 1.44 floppy drive ● **Two PCMCIA slots**
- 512K external video-VGA *(upgr. to 1 MB)*
- **9.4" Dual scan color display**
- Ports: 2 serial, 1 parallel, 1 PS/2 kbd, video
- Built-in **large trackball,** with/without **10-key pad**
- MS-DOS 6.22, MS-Windows 3.11

Fax Modems

- Supra 14.4 S/R Int ..... $ 89
- Supra 14.4 S/R Ext ... $ 129
- Supra 14.4 S/R Mac.. $ 139
- Quicktel 14.4 S/R Int ... $ 85
- 28.8 V34 S/R Int..... $ 199
- PCMCIA 14.4 F-mdm .$ 169
- 28.8 V34 S/R Int..... $ 199

Memory SIMMs

- 1 MB RAM 30-pin ..... $ 41
- 4 MB RAM 30-pin ... $ 159
- 4 MB RAM 72-pin ... $ 169
- 8 MB / 16 MB RAM ..... call

MAIN-LOGIC BOARDS

- 486 ISA VLB-256K ..... $ 119
- Pentium PCI-256K..... $ 259
- 486SLC-33 VLB-256K. .$ 105

Input & Cards

- 101 Enh. Keyboard ..... $ 29
- 101 Kbd. w/trackball ... $ 69
- Microsoft Mouse 2.0 .... $ 52
- 10-key Serial Keypad... $ 39

ADD-ON CARDS

- SVGA-NI, 1MB..... $ 79
- Dmnd Stlth 64 VLB, 1 MB 149
- Dmnd Stlth 64 PCI, 2 MB 319

Hard Drives

- 420 MB IDE ..... $ 195
- 540 MB IDE ..... $ 229
- 1 GigaByte ..... $ 479

FLOPPY DISK DRIVES

- 1.2 / 1.44 MB ..... $ 45 / 41
- Colorado Trakker 350 $ 349
- Conner 420 Tape Dr .$ 189

HP Laser Toner

- HP Toner II, III ..... $ 76
- HP Toner IIP, IIIP ..... $ 70
- HP Toner 4L ..... $ 60
- HP Toner IIISI, IVSI ..$ 129
- HP IV ..... $ 99

HP DESKJET CARTS

- 51626-A ..... $ 26
- 51625-C color ..... $ 29

Diskettes

PACKS of 50

- 3.5" DSHD DOS Fmtd ..39¢
- 3.5" DSHD Mac Fmtd ...49¢
- 3M DSHD Box/10 ....$ 8.69
- Sony DSHD Box/10 .$ 8.99

SYQUEST CARTS EACH

- SyQuest 44/88 MB .$ 54/59
- SyQuest 105 MB ..... $ 69
- SyQuest 270 MB ..... $ 79

CD-ROM Drives

- Panasonic 2X-spin....$ 129
- Mitsumi 2X-spin .....$ 129
- **Generic 2X** Int ..... $ 99
- **Quad 4X**-spin Int ....$ 259

SOUND CARDS

- MCD SndBstr-comp 16 $ 79
- SndBstr 16 SCSI-2.....call
- AWE Snd Blstr-32 .....$ 259

Data Carts - Tapes

- 3M DC 2120.....$ 14
- 3M DC 2120X Qic 80..$ 16
- 3M Magnus 1.2 GB.....$ 38
- Sony DG90M 4 mm DAT..$ 14

OPTICAL CARTS

- 3.5" 128MB optical.....$ 30
- 5.25" 550/650MB opt...$ 69
- 5.25" 1.2/1.3GB opt.....$ 89

818-906-1132
Fax 818-906-1488
HOURS Mon to Fri 9-6, Sat 10-5
— Financing Available! —

CompuCal
SALES - SERVICE NETWORK - TRAINING
14200 Ventura Blvd ● Sherman Oaks CA
VISA & MASTERCARD okay— *All prices reflect 3% cash discount*

dav tech
Computer Center

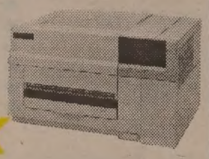
(800) 447-3331

DAV-TECH
Computer Center
...the EXPERTS!

HEWLETT PACKARD
Authorized Reseller

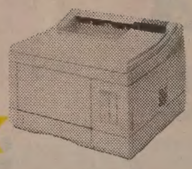
HP LaserJet Printers

HP Color LaserJet Printer
10/2 ppm Blk/Color
300 dpi with RET
8-MB Ram
1 Yr. On-Site Warr.



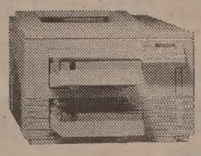
IN STOCK
*DOC ID# 1365

HP LaserJet 4+ Printer
Up to 12 ppm
600 dpi
45 Scalable Fonts
2-MB Ram



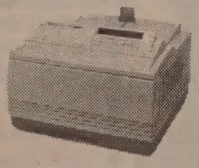
IN STOCK
*DOC ID# 1365

HP LaserJet 4Si Printer
Up to 17 ppm
600 dpi
2 Paper Trays
500 Sheets ea.



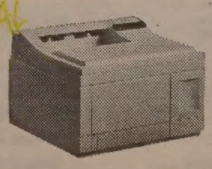
$2799
*DOC ID# 1322

HP LaserJet 4V Printer
Up to 16 ppm
600 dpi
Up to 11" x 17"
4-MB Ram



$1890
*DOC ID# 1374

HP LaserJet 4 Printer
16 ppm
600 dpi
11" x 17"
4-MB Ram
SPECIAL



$1090
*DOC ID# 1320

HP DesignJet Plotters

HP DesignJet 220 Plotter
Enhanced 600 dpi Res., 2-MB Ram, Cut Sheet
Auto Ser/Par Switch, 1-Year On-Site Warranty

$2490 D Size HP C3187A *DOC ID# 5340
$3190 E Size HP C3188A

HP DesignJet 600 Plotter
Enhanced 600 dpi Res., 4-MB Ram. Cut Sheet
& Roll, Auto Cutter, 1-Year On-Site Warr.

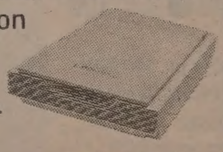
$4190 D Size HP C2847A *DOC ID# 5308
$4990 E Size HP C2848A

HP DesignJet 650C Plotter
600 dpi B/W, 300 dpi Color, 4-MB Ram
Millions of Color, 1-Year On-Site Warranty

IN-STOCK
*DOC ID# 5311

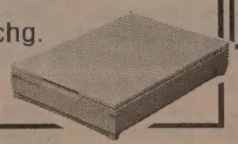
HP Full Page Scanners

HP ScanJet IIcx Scanner
1600 dpi Resolution
24-Bit Color
HP Copier Utility
Calera OCR Softw.



$740**
*DOC ID# 3306 **After $150 Mail-In Rebate

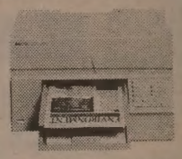
HP ScanJet 3p Scanner
1200 dpi Resolution
8-Bit Gray Scale
SCSI Interface Kit
1-Year Express Exchg.



$475
*DOC ID# 3307

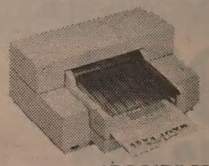
HP DeskJet Printers

HP DeskJet 1200C Printer
InkJet Color Printer
600 X 300 dpi
2-MB Ram
Millions of Colors



$999
*DOC ID# 2386

HP DeskJet 560C Printer
B/W & Color
2 Ink Cartridges
300 X 600 dpi
3-Year Warranty



$475
*DOC ID# 2388

HP Vectra Interactive PC

monitor not included

VL2 4/66 MM
486DX2-66MHz
8-MB, 340-MB Enh. HD
1-MB Local Bus Video
16-bit DSP Audio
Upg. to Pentium Overdrive
MultiMedia, 3-Years Warr.

$1790 HP D3043A

VL2 4/50se MM
486SX2-50MHz
4-MB Ram, 210-MB HD
16-bit DSP Audio
with SCSI-2 Interface
NEC 2X CD-Rom
MultiMedia, 3-Years Warr.

$1350 HP D3045A

Genuine HP Accessories

HP LaserJet Sheet Feeder	$275
HP LaserJet Envelope Feeder	$275
HP LaserJet Duplex Option	$375
HP 10Base T JetDirect Card	$299
HP PostScript Upgrade	$399
HP ScanJet 3P Doc. Feeder	$260
HP ScanJet IICx Doc. Feeder	$488
HP ScanJet IICx Trans. Adaptor	$650

All HP Printer Supplies & Accessories IN STOCK.

*FAX BACK: FOR MORE INFORMATION ON PRODUCTS CALL 800-333-1917 & ENTER CORRESPONDING DOC. ID#

DAV-TECH Computer Center
6314 Hollywood Blvd. (at Vine) Los Angeles, CA 90028
Free parking in rear with validation. Prices subject to change without notice.

(800) 447-3331
(213) 463-3001
Fax: (213) 469-7255

DAV-TECH Computer Center has been supplying Hewlett Packard products to Southern California since 1983.

We are "THE HP EXPERTS"

EDUCATIONAL DISCOUNT

for
SCHOOLS, UNIVERSITIES
FACULTY and STAFF

call for details

TRADE-IN PROGRAMS AVAILABLE

call for details

dav tech
Computer Center

(800) 447-3331

HP Omnibook Notebook PC

HP Omnibook 4000 Notebook PC

Local Bus Video, 2 PCMCI Type 2 Slots
16-bit Stereo Sound, Built-in Stereo Speakers
Enhanced Port Replicator, 3-Year World Wide Warr.

HP OmniBook 4000C 4/50 — $2790
486DX2-50, 4-MB RAM, 260-MB HD
10.4" DualScan Color Screen

HP OmniBook 4000CT 4/75 — $4190
486DX4-75, 8-MB RAM, 340-MB HD
10.3" Active Matrix Color Screen

HP Omnibook 600C Notebook PC

3.8 lbs, Local Bus Video. 2 PCMCI Type 2 Slots
Ergonomic Popup Mouse, External 3.5" Floppy
Dual Scan 8.4" Screen, 3-Year World Wide Warr.

HP OmniBook 600C 4/50 — $2395
486DX2-50, 4-MB RAM, 170-MB HD

HP OmniBook 600C 4/75 — $3190
486DX4-75, 8-MB RAM, 260-MB HD

HP PalmTop

HP 200LX PalmTop PC

FREE Leather Case with Purchase ($40 Value)

$650

2-MB RAM, 3-MB ROM
Built-in Software:
MS-DOS 5.0, Pocket Quicken
Lotus 1-2-3 R 4.2, Lotus cc:Mail
Data Comm., Scheduler
Appointment Book, Phone Book

All Accessories IN-STOCK

HP OfficeJet

"ALL IN ONE"

PRINTER — $777
600 X 300 dpi Inkjet
DOS & Windows Comp.
Optional MAC Interface

*DOC ID# 9657

COPIER
Up to 99 Copies
Reduction Capability
40 Character Display

FAX
10 Page ADF
24-Page Memory
10-sec PP Transm.

DAV-TECH PC's

DT 486DX2-66 Model 540

8-MB RAM, 540-MB IDE HD
3.5" Floppy Drive, DOS 6.22,
Windows 3.11, Microsoft Mouse
1-MB Local Bus Video Card
15" SVGA Color Monitor
(1280 X 1024 NI .28 dp)
101 Enhanced Keyboard
2 Serial, 1 Parallel, 1 Game

$1495

DT MultiMedia 486DX2-66

Same as above except:
14" SVGA Color Monitor
(1024 X 768 I .28 dp)
Creative Labs 16 Bit Sound
SONY 2X CD-ROM
2-Watt Stereo Speakers
MS Encarta, Works, Money

$1675

DT Pentium 90 Model 850

16-MB RAM, 840-MB IDE HD
3.5" Floppy Drive, DOS 6.22,
Windows 3.11, Microsoft Mouse
ATI Mach 64 PCI Video 2-MB
17" SVGA Color Monitor
(1280 X 1024 NI .28 dp)
101 Enhanced Keyboard
2 Serial, 1 Parallel, 1 Game

$2766

DT MultiMedia Pentium 90

Same as above except:
8-MB RAM, 540-MB IDE HD
14" SVGA Color Monitor
(1024 X 768 I .28 dp)
Creative Labs 16 Bit Sound
SONY 2X CD-ROM
2-Watt Stereo Speakers
MS Encarta, Works, Money

$2375

HP Plain Paper FAX

HP FAX 900 / 950

Plain Paper InkJet
Auto. Doc. Feeder
10-page Memory

HP FAX 900 — $625**

HP FAX 950 — $750

*DOC ID# 3306/9642 **After $75 Mail-In Rebate

MULTI MEDIA

Media Vision Family Deluxe

-Double Speed CD-ROM
-16-bit Sound Card
-2 Speakers
-Utility Programms
-2 CD Titles

$320

Game Blaster CD 16

-SoundBlaster 16-Bit
-Double Speed CD-ROM
-Stereo Speakers
-Utility Software
-17 CD Titles

$425

Edutainment CD 16

-SoundBlaster 16-Bit
-Double Speed CD-ROM
-Stereo Speakers
-Micro Phone
-42 CD Titles

$495

DAV-TECH Computer Center

6314 Hollywood Blvd. (at Vine) Los Angeles, CA 90028
Free parking in rear with validation. Prices subject to change without notice.

(800) 447-3331
(213) 463-3001
Fax: (213) 469-7255

DAV-TECH Computer Center has been supplying Hewlett Packard products to Southern California since 1983.

We are "THE HP EXPERTS"

Contents

MICROTIMES™

February 6, 1995 • Issue #133

COVER STORY

96
Online Services: Challenges And Opportunities
BY MARY EISENHART • PHOTOS BY ANNE KNUDSEN

Tim Oren, VP of future technology at CompuServe, looks at the changing world of networks and shares his insights into the challenges and opportunities facing CompuServe.

News & Views

18
Industry Insight
BY PAUL HOFFMAN

Pentium Fiasco, Round II 18
Macintosh Clones 20
MicroTimes Stock Index 22

27
Realizable Fantasies
BY JIM WARREN

NewtNet and the revolution of '96.

242
Dvorak's Last Column
Highlights from what went wrong in 1994.

Business Solutions

35
Pens & Palmtops
BY MITSU HADEISHI

Hands-on look at the MagicLink from Sony.

44
Laptops
BY ED KAHN

Help tools for working with Windows, plus HP OmniBook 600.

54
Networking
FORMERLY CALLED LANs

BY PETER JOHN HARRISON

Setting up an Internet LAN connection—part 1.

59
Small Office/Home Office
NEW!

BY BIRRELL WALSH

Optimizing the home office.

70
Telecommuting
BY ROBERT MOSKOWITZ

Software park offers virtual and physical space for businesses.

NEW!

Online Guide

80
Internet
BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL

How to register domain names.

84
Online Services
BY KATHLEEN CREIGHTON

Life in the online fishbowl: CompuServe, Unisys, and .GIF.

88
Web Page Listings

Multimedia & Beyond

152
Multimedia 101
BY JONATHAN E.

Further adventures in the land of interactive music.

162
Amiga
BY DOUGLAS J. NAKAKIHARA

WarpEngine: new life and more speed for the Amiga.

176
Excellent Entertainment
BY TONY REVEAUX

Great CD-ROM titles and how they're made.

183
Multimedia Kiosk Overcomes Designer Anxiety
BY SUSAN KUCHINSKAS

DesignFinder interactive interior designer referral kiosk.

CREATIVE COMPUTERS

TM

CREATIVE COMPUTERS, the Largest Apple® Macintosh® Dealer in California announces:

MACINTOSH™ BEST BUYS!

All of the 2,500 Macintosh® items we stock in our stores are at mail-order prices!!

90 Days same as cash FINANCING AVAILABLE

1994 MacInTax Federal Final Version

$37.99 #68431

CREATIVE COMPUTERS MacMall YOUR MAC SUPERSOURCE!

TO ORDER VIA MAIL

Call Creative Computers' MacMall 800-222-2808

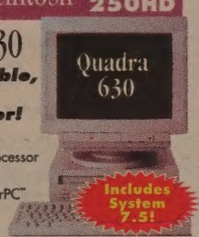
OPEN 24 HOURS!

Offer Code: D52MMT01

Apple® Macintosh® 4MB 250HD

Quadra® 630

Most Affordable, Flexible Quadra® ever!



- 68040 processor with integrated math coprocessor
- 66/33 MHz speed
- Upgradeable to PowerPC™
- Four expansion slots, including:

Communications slot that accepts Ethernet or Modem cards; LC PDS slot; Video slot for Apple® Multimedia Video System (NTSC/PAL/SECAM); and a slot for a cable-ready TV tuner card

- Optional internal AppleCD™ 300i Plus CD-ROM
- 1MB VRAM for built-in monitor support

$1079 part# 66657 Keyboard and monitor extra

Apple® Macintosh® 8MB 250HD

Performa® 630CD

Complete System

- Performa® 630 8/25 CD-ROM (68LC040, 66/33MHz processor)
- Apple® Performa® Plus Color Display (.28 Dot Pitch)
- Apple® Standard keyboard
- Global VillageTeleport Fax/Modem (with Send Fax)
- $750 worth of FREE software!

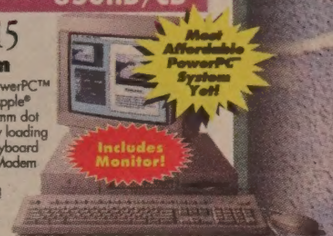
Free software: System 7.5 with Launcher, At Ease™ and Macintosh® PC Exchange™, Mac Gallery Clip Art, KidWorks,, ClarisWorks 2.1, Quicken 4, Click Art Performa® Collection, TelePort Fax/Modem Software, e-World™, MacLink Plus Translators, Thinkin' Things, The Writing Center, SpinDoctor CHallenge, Crossword Wizard, American Heritage Dictionary 3rd Edition, Spectre Challenger. **Free CD-Rom titles:** New Grolier's Multimedia Encyclopedia CD, 3D World Atlas CD, Wacky Jack's CD, Time Almanac CD, The Family Doctor CD, Dole Five a DAy Adventure CD

$1899 part# 67134

Apple® Macintosh® 8MB 350HD/CD

Performa® 6115

Complete System



- Performa® 6115, 8/350/CD (PowerPC™ 601 RISC processor, 60MHz) • Apple® MultipleScan 15-inch Display (.28mm dot pitch) • Internal double-speed, tray loading CD-ROM drive • AppleDesign™ keyboard • 14.4 bps Teleport /Gold II Fax/Modem (with Send/Receive Fax)
- $750 worth of FREE software!

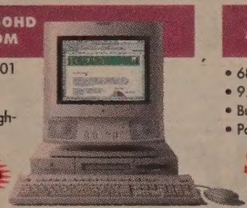
Free software: System 7.5 with Launcher, At Ease™ and Macintosh® PC Exchange™, ClarisWorks 2.1, Quicken 4, Mac Gallery Clip Art Treasure Pack, Click Art Performa® Collection, eWorld™, TelePort Fax/Modem Software, MacLink Plus/Easy Open Translators 7.5, American Heritage Dictionary 3rd Edition, Now Up-to-Date 2.1.1, Now Contact 1.1, Spectre Challenger 1.0.1, Spin Doctor Challenger 1.1. **Free CD-ROM titles:** New Grolier's Multimedia Encyclopedia, 1994 Time Almanac, 3D World Atlas, Family Doctor, Around the World in 80 Days, KidSoft CD.

The high-performance of PowerPC™ with the added value of an all-inclusive solution in a single box!

$2699 part# 67028

Apple® Power Macintosh® 6100/66 8MB/350HD CD-ROM

- Power Macintosh™ 6100/66 , 8/250 CD-ROM (PowerPC™ 601 RISC™ processor, 66-MHz)
- Memory expandable to 72MB
- Internal expansion slot for one 7-inch NuBus™ expansion card; high-performance SCSI that supports up to seven SCSI devices



$1899 part# 67841 Run your applications up to 30% faster!

Keyboard and Monitor not included

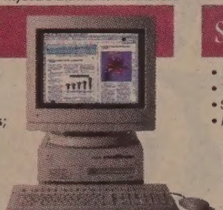
Apple® PowerBook® 540C 4MB/320HD

- 68LC040, 50/25 MHz Processor
- 9.5" dual-scan, passive matrix display (256 colors)
- Built-in, 33MHz Ethernet for exeptional speed
- PowerPC™ upgradeable

$3949 part# 66262 Includes FREE PowerBook® Mobility Bundle!

Apple® Power Macintosh® 7100/80 8MB/500HD

- Power Macintosh™7100/80, 8/500 (PowerPC™ RISC™ processor, 80MHZ)
- Memory expandable to 136MB
- Internal expansion slots for three full size NuBus™ expansion cards; high-performance SCSI that supports up to seven SCSI devices



$2729 part# 68201 Run your applications up to 40% faster!

Keyboard and Monitor not included

Sony Speaker and Monitor Combination

- 15-inch, SONY Multiscan 15sf display, Trinitron tube.
- 1280x1024 pixels resolution at 60Hz
- SONY CSS-B100 Computer Speaker System that delivers remarkably rich sound
- Magnetic shielding limits interference

SONY SONY Multiscan 15 Display $439 part# 65159

SONY CSS-B100 speakers $98.99 part# 65774

HOT ROD Your Multimedia!

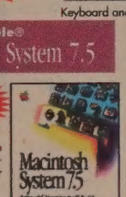
Magnavox 14" Color Monitor

- Model CM 2080
- 640x480 resolution
- Super fine .29 dot pitch • 66.7 Hz vertical refresh rate
- Meets ELF/ VLF low emission guide-lines
- Least expensive Macintosh® monitor available!

$269.99 part# 61905

Apple® Macintosh® System 7.5

NEW!



It's powerful, it's easy to use— it's the new operating system for your Macintosh®!

$98.99 part# 65948

Apple® Color StyleWriter® 2400

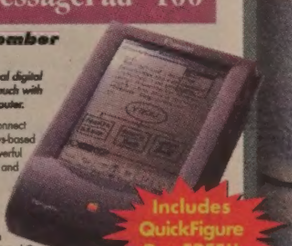
- Thermal ink-jet
- 360 dpi • 3 ppm /gray-scale, .3 ppm /color • 64 scalable TrueType™ fonts
- Two separate ink cartridges • Waterfast ink
- EtherTalk and TokenTalk support via ColorShare™

Includes 2 Ink cart., Ink Tanks, Color Media part# 66644 $449

Apple® Newton® MessagePad™ 100

The most affordable member of the Newton® family.

The Apple® Newton® MessagePad™ 100 personal digital assistant helps you manage information, stay in touch with people, and exchange information with your computer.



It runs a wide range of useful software, and it can connect with your Apple® Macintosh® computer or Windows-based PC (with the optional Newton® Connection Kit). Powerful handwriting-recognition capabilities for both printed and cursive writing allow the MessagePad™ to either transfer your notes into text letter by letter, word by word, or save them in handwritten form. It can help you organize ideas, take notes, and make sketches. The NewtonMail™ feature lets you stay in touch with other Newton® MessagePad™ users, and with Macintosh® and Windows-based computer users with an optional modem.

• 640K RAM, 4MB ROM • LocalTalk® • Prints to Apple® LaserWriter® and Apple® StyleWriter® printers with serial cable, or to parallel printers using Newton® Print pack • Can exchange data with an Apple® Macintosh® computer or PC • Supports Group 3 fax machines • Wireless message capability • Extended battery life • Enhanced user memory • Includes QuickFigure Pro Software Free!

$199.99 part# 68703

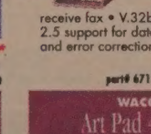
Connectix RAM Doubler 1.5

Doubles your RAM without complicated installation or expensive hardware. It gives your Mac™ twice as much memory to open applications. Just double click to double your RAM. RAM Doubler is compatible with all applications. Requires Macintosh® II or better, 4MB of RAM. *With Microsoft® Word, Microsoft® Excel or Macintosh® computer purchase.

Accelerated for Power Macintosh™

$49.99* part# 66970

Best Data 14.4 Data/Fax Modem



Ultra fast fax/modem

- 14,400 bps full duplex data
- 14, 000 bps send/ receive fax • V.32bis, V.42bis, MNP 2.5 support for data compression and error correction.

$88.99 part# 67174

Apple® 340MB External Hard Drive

- Front panel power-on switch
- Simple SCSI ID check or change under a front mounted pop-up panel
- Complete set of cables, operating software and terminator
- Advanced 3-1/2 drive technology provides fast data access

$374.99 part# 66395

Double Speed CD-ROM Drive

Double Speed External CD-ROM Drive

- Exceptional Speed and Dependability
- Space Saving Design
- Toll Free Support and 2 Year Warranty

$179.99 part# 68028

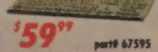
WACOM Art Pad 4" x 5"

Its thin, contoured design lets your hand glide easily on and off the tablet. Ideal for everyday graphics and natural *"touch and move"* SCREEN navigation.

Includes cordless/ batteryless UltraPen part# 67146 $148.99

VividKEY Extended Keyboard

Provides Macintosh® users with a superior extended keyboard, top notch ALPS mechanical keyswitches and 15 macro-storage keys. A pleasure to use.



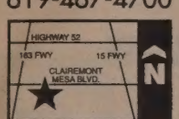
Why pay $149 at our competitors? $59.99 part# 67595

DOS Compatibility Card for the Power Macintosh 6100

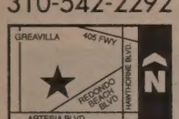
For those customers who desire a cross-platform hardware solution, the DOS Compatibility Card will offer mainstream 486 DX2/66 performance and Soundblaster support for multimedia usage, making this a powerful dual processor system. $699.99 part# 68208

Authorized Catalog Reseller

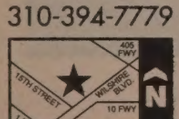
SAN DIEGO
8841 Clairemont Mesa Blvd.
Kearny Mesa
619-467-4700



SOUTH BAY
4453 Redondo Beach Blvd.
Lawndale
310-542-2292



SANTA MONICA
1505 Wilshire Blvd.
Santa Mon'ca
310-394-7779



ORANGE COUNTY
23710 El Toro Road, Ste F-1
Lake Forest / El Toro
714-859-3300

SOUTH BAY AND SANTA MONICA
10-7pm MON-SAT
11-6pm SUN

ORANGE COUNTY
10-7pm MON-SAT
Closed SUNDAYS

SAN DIEGO
9-7pm MON-FRI
10-7pm SAT
11-6pm SUN

Apple, the Apple logo, LaserWriter, StyleWriter, Macintosh Quadra, Mac & Macintosh are registered trademarks of Apple Computer, Inc. PostScript is a trademark of Adobe Systems Inc. MS-DOS is a registered trademark of Microsoft. Newton, Message Pad, System 7, LocalTalk, GeoPort & Power Macintosh are trademarks of Apple Computer, Inc. Trinitron is a trademark of Sony. NuBus is a trademark of Texas Instruments. PowerPC is a trademark of IBM Corp. Classic is a trademark licensed to Apple Computer, Inc. Prices and specifications subject to change without notice. Limited to stock on hand. IMPORTANT: While we do our best to check errors, mistakes may occur — Call to verify pricing.

PREMIUM PERFORMANCE.

Gigatek's DC2120 QIC-80 Formatted Data Cartridges.
With 120 MB Capacity/250 MB Compressed
and a Lifetime Warranty.
Designed for High-Performance Back-Ups.

GIGATEK
MEMORY SYSTEMS, INC.

Committed to Providing You With Storage Solutions You Can Depend On.

Contact Your Local Dealer For Special Introductory Offer!

PCMCIA-ATA STORAGE

Now Get a 42MB Western Digital "Caviar" 1.8" Removable Hard Drive For Only . . . $69

Perfect for transporting data between portable and desktop computers — or between home and office PC's — the easy-to-use "Caviar" lets you carry all your files and applications on a removable, credit card-sized disk drive.

Model CU140

Quantity Discounts ■ Dealer Inquiries Welcome

Desktop Reader/Writers from ProTégé

...seamlessly integrate PCMCIA-ATA support into any 16-bit ISA PC...support PCMCIA-ATA Type I & II Flash cards and Type III hard drives...use standard MS-DOS utilities.

Internal w/controller card $99
External w/controller card $149

SAVE AN ADDITIONAL $10 When You Bundle a Drive and a Reader/Writer.

Quantities Are Limited, So Call Today: (714) 961-7000

Prices are C.O.D. or Visa/Mastercard/American Express/Discover Card

PCM®

PCM Technologies, Inc. ■ 4165 East La Palma Avenue, Anaheim, Calif. 92807
(714) 961-7000 ■ FAX (714) 961-0102

Contents
MICROTIMES
February 6, 1995 #133

Resources

198
Calendar Of Events

Computer Show and Sales Expo 198
COMPUCON '95 198
Technology And Persons With Disabilities Conference 298

207
User Group Network

BBS Spotlight: BBSing Made Wonderful.

224
Classifieds

237
Index Of Advertisers By City

240
Index Of Advertisers

Micro Marketplace
A Special Advertising Section for Southern California Buyers
Starts On Page 72

LOWEST PRICE GUARANTEED!

PENTIUM 90

Intel Pentium 90MHz CPU
8 MB RAM
730 MB Hard Drive
14" SVGA Color Monitor NI
4X Quad Speed CD-ROM

- PCI 64 BIT SVGA Graphics Card
- PCI IDE Controller Card
- 16 BIT CD Quality Sound Card
- Multimedia Magentically Shielded Speaker
- 3.5" 1.44 MB Floppy Drive
- 101 Enhanced Keyboard
- Hi-Res Microsoft Compatible Mouse
- Mid Tower Case

Or $61 Per Month O.A.C.

$2199

PENTIUM 60

Intel Pentium 60MHz CPU
8 MB RAM
540 MB Hard Drive
14" SVGA Monitor 1024x768 Res.
Double Speed CD-ROM

- PCI 64 BIT SVGA Graphics Card
- 16 BIT CD Quality Sound Card
- Multimedia Magentically Shielded Speakers
- 3.5" 1.44 MB Floppy Drive
- 101 Enhanced Keyboard
- Hi-Res Microsoft Compatible Mouse
- Mid Tower Case

Or $48 Per Month O.A.C.

$1699

DX2-66

Intel 486DX2-66MHz CPU
8 MB RAM
420 MB Hard Drive
14" SVGA Monitor 1024x768 Res.
Double Speed CD-ROM

- Local BUS 32 BIT Graphics Card w/ 1 MB
- 16 BIT CD Quality Sound Card
- Multimedia Magentically Shielded Speakers
- 3.5" 1.44 MB Floppy Drive
- 101 Enhanced Keyboard
- Hi-Res Microsoft Compatable Mouse
- Mini Tower Case

Or $36 Per Month O.A.C.

$1299

NOTEBOOK

ACERNOTE 760
9.5" Dual Scan Color
INTEL 486DX2-50MHz CPU
4 MB RAM (Exp. to 12 MB)
340 MB IDE Hard Drive

- PCMCIA Type III or Type II Slots
- 3.5" 1.44 MB Floppy Drive
- DOS 6.2, Windows 3.1 w/ Manuals
- Nickel Metal Hydride Battery
- AC Adapter
- Built In Trackball

$2149

Multi-Media KIT

- Double Speed CD-ROM Drive
- Sound Blaster 16 BIT CD Quality Sound Card
- Multimedia Magnetically Shielded Speakers
- 6 CD Titles Including Encyclopedia

$239

W.L.A.
1786 Westwood Blvd.
W. L.A., CA 90024

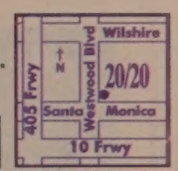
VISA

HOURS:
Mon. to Sat. 9-7pm.
Sundays Closed

20/20 Technologies®

ENCINO
17487 Ventura Blvd.
Encino, CA 91316

Prices Subject to Change Without Notice. Prices Good With This Ad Only. All Prices are Cash / Check Discounted.



(310) 441-8855 (818) 501-1093

Contributors MICROTIMES

Robert Moskowitz *(RMoskowitz@aol.com)* is a consultant based in Woodland Hills.

Smoot Carl-Mitchell *(smoot@tic.com)* is the managing partner of TIC (Texas Internet Consulting) and president of MIDS (Matrix Information Directory Services).

Jonathan E. has worked with desktop multimedia since 1988. He also writes about world music and the Archaic Revival for *BAM*. His USPS mailing address is c/o SoundSwell, 54 29th St., Richmond, CA 94804. His email address is *jeve@well.sf.ca.us* .

Mitsu Hadeishi *(mitsu@openmind.com)* is the owner of Open Mind Systems in Ashland, OR.

Paul Hoffman is an independent consultant who's been writing about computers for over fifteen years.

Susan Kuchinskas *(lynx@well.sf.ca.us)* is an Oakland-based writer who believes that design is where you find it.

Doug Nakakihara *(DNakakihara@BIX.com)* is a CPA by trade and an Amiga enthusiast by inclination.

John S. Quarterman *(jsq@tic.com)* is the senior technical partner of TIC (Texas Internet Consulting) and editor of *Matrix News*. He is a longtime observer, consultant, and writer on the matrix of electronic networks.

Tony Reveaux, a San Francisco-based consultant, writes the "MediaScan" column in *Film/TapeWorld*, and is the West Coast Correspondent for *Computer Video*. He can be reached via the Internet (*luna@well.sf.ca.us*) or MCIMail (290-3008).

Kathleen Creighton *(casey@well.sf.ca.us)* is a long-time observer of the online scene.

John C. Dvorak is a prolific author on many computer-related subjects and a collector of Internet humor.

Ed Kahn *(edkahn@well.sf.ca.us)* is a writer and consultant based in Pinole.

Birrell Walsh works at KQED in San Francisco and looks into the interesting but often unexplored areas of the computer world.

Jim Warren *(jwarren@well.sf.ca.us)* has received the Hugh M. Hefner First Amendment Award (1994), the James Madison Freedom-of-Information Award from the Society of Professional Journalists—Northern California (1994) , and the Electronic Frontier Foundation Pioneer Award (1992, its first year). He led the successful 1993 effort to make state legislation and statutes available via the public nets without state fees.

He organized and chaired the landmark First Conference on Computers, Freedom & Privacy (1991), founded *InfoWorld*, was founding host of PBS's *Computer Chronicles* and founding editor of *Dr. Dobb's Journal*, and has chaired various computer and mathematics organizations. He holds graduate degrees in computing (Stanford), medical information science (UC Medical Center), and mathematics and statistics. He began working as a programmer in 1968, and was a mathematics teacher and professor for ten years before that. He also serves on Autodesk's board of directors.

Peter John Harrison *(peterh@well.sf.ca.us)* is a San Mateo-based data communications and connectivity specialist.

Express Yourself!

Send Letters to the Editor to us at these addresses:

US Mail:
Letters
MicroTimes
3470 Buskirk Avenue
Pleasant Hill, CA 94523
fax: (510)934-3958
Internet:
microx@well.sf.ca.us
MCI: *MicroTimes*
America Online: *MicroTimes*

UNITEK™

90 DAY FREE FINANCING

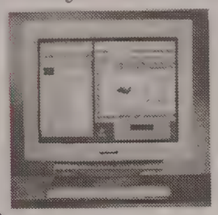
W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310.820.2400
Fax. 310. 826. 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax. 818. 907. 7799

SONY.
Authorized Dealer

Sony CPD-1730
New Lower Prices

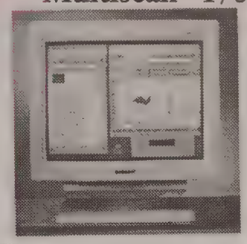
Trinitron Digital Control Color Monitor



- **Mac Compatible**
- 17" Super Fine PitchTM Multiscan® Trinitron® color display
- .25mm Aperture Grille pitch
- Maximum resolution of 1024 x 768 at 72Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 58kHz
- Overscanning for crisp edge-to-edge images
- Sony Display Memory System provides easy-to-use digital control of screen images
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$779

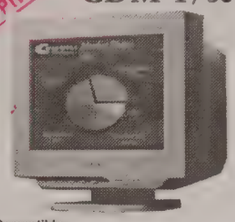
Multiscan® 17sf
New



- **Mac Compatible**
- 17" Digital Multiscan® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design feature simple control buttons and minimizes footprint
- Includes color temperature control #SON-17SF

$839

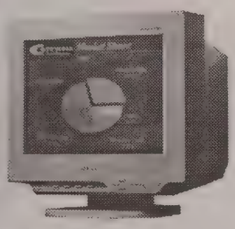
GDM-17se
New Lower Prices



- **Mac Compatible**
- 17" Super Fine PitchTM Multiscan® Trinitron® color graphic display
- Unique ASIC design automatically adjusts image geometry parameters across a continuous range of scan frequencies
- Energy Star and VESA-DPMS compliant
- .25mm Aperture Grille pitch
- Maximum resolution of 1280 x 1024 at 77Hz refresh
- Horizontal scan range of 31.5 to 82kHz
- Easy-to-use digital control of screen images
- Includes color temperature control for publishing, photography, imaging, and design applications
- Swedish MPR II compliant

$949

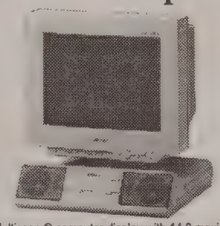
Multiscan® 15sf



- **Mac Compatible**
- 15" Digital Multiscan® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design feature simple control buttons and minimizes footprint
- Includes color temperature control #SON-15SF

$419

CPD-15sf w/speakers



- 15" Digital Multiscan ® computer display with 14.0 maximum diagonal viewable area
- Trinitron® technology delivers bright images and vibrant colors
- .25mm Aperture Grille pitch
- EPA Energy Star and MPR II compliant
- Supports PC and Macintosh resolutions from VGA to 1280 x 1024 at 60Hz
- New design feature simple control buttons and minimizes footprint
- Includes color temperature control
- INCLUDES SONY CSS-B100 Computer Speaker System Space-saving ergonomical design fits under computer monitor

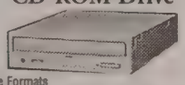
$509

GDM 20se

- **Mac Compatible**
- 20" Super Fine PitchTM Multiscan® Trinitron® color graphics display monitor
- .30mm Aperture Grille pitch
- Maximum resolution of 1600 x 1200 at 80Hz refresh (non-interlaced)
- Variable scan frequency of 28 to 85kHz
- Overscanning for crisp edge-to-edge images
- Energy Star Compliance Ecologic
- Includes color temperature control for publishing, photo and design applications
- Full compliance with Swedish MPR II standards for VLF/ELF magnetic and electrical emissions

$1829

Internal Double-Speed CD-ROM Drive

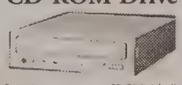


•Compatible Formats
-MPCII -Multisession Photo CD -CD-ROM MODE 1 and 2 Discs-CD Digital Audio
•Interface
-Sony SLCD AT-type Bus
•Average Access Time
-320ms typical (double)
-400ms typical (single)

w/o Interface Kit **$139**

CDU-33A01

Internal SCSI CD-ROM Drive



•Compatible Formats
-MPC II
-Single and Multisession Photo CD
-CD-ROM XA
-CD Bridge
-CD-ROM Mode 1 and 2 discs
-CD-Digital Audio
•Interface
-SCSI-2 bus
•Average Access Time
-Single speed: 350ms
-Double speed: 250ms
-2.4 xspeed: 220ms

$179

CDU-55S01

3.5" DDS-2 DAT Tape Drive

•Cap: 4GB
•Interface: SCSI-2
•Access time: 35 seconds maximum

Int: $849 Ext: $979

SDT-5200/M

3.5" DDS-2 DAT Tape Drive

•Cap: 4GB w/o data compression
8GB w/data compression
•Interface: SCSI-2
•Access time: 35 seconds maximum
•Sustained transfer rate: 366-732 KB/sec.

Int: $919 Ext: $1039

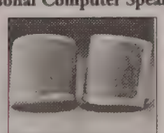
SDT-5000/M

SRS-PC20
Personal Computer Speakers

•Built-in amplifiers: 1 watt per channel (2W)
•Speaker controls: Master volume, Bass boost

$33.99

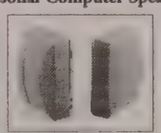
SRS-PC30
Personal Computer Speakers



•Built-in amplifiers: 1.5 watts per channel (3W)
•Speaker Controls: Master volume, Bass boost

$62.99

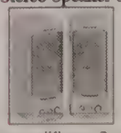
SRS-PC50
Personal Computer Speakers



•Built-in amplifiers: 2.5 watts per channel (5W)
•Speaker Controls: Master volume, Bass boost

$89.99

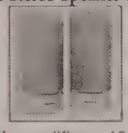
SRS-58PC
Active Stereo Speaker System



•Built-in amplifiers: 3 watts per channel (6W)
•Speaker controls:
Independent volume for optimum stereo balance, Independent Dynamic Equalizer System

$84.99

SRS-88PC
Active Stereo Speaker System



•Built-in amplifiers: 10 watts per channel (20W)
•Speaker controls:
Independent volume for optimum stereo balance, Independent Dynamic Equalizer System

$129.99

SRS-D2KPC
3-Piece Personal Computer Speakers

•3-piece design: two full-range, bass reflex speakers, one bass reflex subwoofer
•Speaker controls:
Independent volume for optimum stereo balance Independent Dynamic Equalizer System

$139.99

Sony, Trinitron, Multiscan, and Super Fine Pitch are trademarks of Sony

UNITEK™
computer stores
The Most Complete Apple® Stores!

W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310.820.2400
Fax . 310 . 826 . 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax . 818 . 907 . 7799

Authorized Reseller
Authorized Service Provider

Apple® Macintosh® Performa® 475
- Complete System
- 68040/25MHz Processor
- 4MB Ram, 160MB HDD
- 12 Software Programs, already Built-In
- 14" RGB Color Monitor
- Fax modem send fax • KB and Mouse
- Multimedia Ready
- 1 year limited warranty
- 1 year of in-home Service

COMPLETE SYSTEM
$1099 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 550
- 5MB Ram, 160MB HDD
- 68030/33MHz Processor
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD-ROM and Music
- Built in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse

COMPLETE SYSTEM
$1299 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 575/577
- Complete System
- 68030/33/66MHz Processor
- 250 MB HDD
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD ROM drive for both CD ROM and Music
- Built in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse
- 5MB Ram 250MB HDD/Performa 575
- 5MB Ram 320MB HDD/Performa 577

$1799/$1849 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 578
- Complete System
- 68030/33/66MHz Processor
- 8MB Ram, 320 MB HDD
- 4 Interactive CD-ROMs
- 12 Software Programs
- Internal CD ROM drive for both CD ROM and Music
- Built-in 14" Sony Color Monitor
- Global Village 24/98 Fax/Modem
- Keyboard & Mouse

$1999 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 630
- Complete System
- Motorola 68040 66-MHz processor/33MHz data bus
- 250MB HDD
- Integrated 14" plus Display
- Apple Design KB
- 12 Software programs
- Internal CD-ROM
- Fax/Modem
- 6 CD Titles
- 1 year of in-home Service

$1499 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 630CD
- Complete System
- Motorola 68040 66-MHz processor/33MHz data bus
- 8 MB RAM
- 250MB HDD
- Integrated 14" plus Display
- Apple Design KB
- 12 Software programs
- Internal CD-ROM
- Fax/Modem • 6 CD Titles
- 1 year of in-home Service
- Internal CD Rom w/Performa 630CD only

$1899 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 638CD
- Complete System
- Motorola 68LC040/66/33MHz processor/33MHz data bus
- 8 MB RAM/350MB HDD
- Apple TV/Video System
- Apple Multiple Scan 15" Display
- Internal CD Drive w/Many CD's
- KB, Modem, Software Incl.

$2299 BEAT/MEET ANY PRICE*

Apple® Macintosh® Performa® 6115CD
- Complete System
- Power PC 601/60MHz
- 8MB Ram, 350MB HDD
- Apple Multiple Scan 15" Display
- KB, Monitor, Modem
- Global Village Teleport II 14.4
- Apple Design Keyboard, Mouse, Int. CD Drive

$2699 BEAT/MEET ANY PRICE*

Apple® Macintosh® PowerBook® 150
- 68030 Microprocessor
- 33MHz
- 9.5" Backlit, Passive Matrix, Gray-Scale

4/120
$1359

Apple® Macintosh® Duo® 280C
- 68040, 33MHz, 68LC040
- Power PC Upgradable
- Duo Dock & Floppy Options
- Upgradable to 40MB
- Active Matrix Screen

4/240
$3289

Apple® Macintosh® PowerBook® 520/520C
- Motorola 68LC040 50/25MHz
- Upgradable to Power PC Built-In Ethernet

520 4/160 **$2059**
520C 4/160 **$2619**

Apple® Macintosh® PowerBook® 540C
- Motorola 68LC040 66/33 MHz
- Upgradable to PowerPC
- Expandable to 36MB

540C 4/320
$BEST PRICE

Radius® VideoVision™ Studio
Professional Macintosh Digital Video System
- High Performance Digital Video Compression
- Broadcast Quality Video

$3299
ENCINO Store Only
LIMITED QUANTITY

Apple® Presentation™ System
- For Any Macintosh™ with a video output port
- Output to large TV screen and print to VCR Tape

$279

Apple® QuickTake™ 100
- Macintosh™ /Windows
- QuickTake software
- 24-Bit Color
- High Resolution
- Automatic Flash
- Memory:stores 32 images/1MB

$659

UNITEK Encino ANNOUNCES
FULL LINE DEALER
MUSIC & WRITERS SOFTWARE
MARK OF UNICORN
•PERFORMER•UNISYN•MOSAIC•FREESTYLE
OPCODE SYSTEMS•STEINBERG
JONES•FINAL DRAFT•SCRIPTOR
SCRIPT WIZARD•MOVIE MAGIC
BUDGETING•MOVIE MAGIC
SCHEDULING•DRAMATICA•CORKBOARD

*If you see a lower legitimate advertised price that can be verified from a local Authorized Apple Dealer on the exact same In-Stock item, Unitek will be happy to MEET/BEAT the competitions price

Apple® Power Macintosh™ Card
- Upgrade Macintosh Quadra/Centris 610, 650 or Quadra 700, 800, 900, 950 & System Software

$489

Apple® Power Macintosh™ AVCard
- SVideo In/Out
- 2MB VRAM
- 6100 & Perf 61xx 7100 & 8100 models to AV

$429

Apple CD® 300 Plus
- Double Speed
- 300MSEC

$289
*Installation Available

Apple® Multimedia
- Apple CD300e Plus
- Apple Speakers II
- Cables
- Apple Head Phones
- Encyclopedia & 3 other CD's

$469

Apple, the Apple logo, LaserWriter, StyleWriter, Mac, & Macintosh are registered trademarks of Apple Computer Inc. PostScript is a trademark of Adobe Systems Inc. Classic is a registered trademark, licensed to Apple Computer Inc., PowerBook Duo, Macintosh, System 7, Macintosh Quadra & Power Macintosh are trademarks of Apple Computer, Inc. All prices reflect a cash discount. Prices subject to change w/o notice. Limited to stock on hand. Unitek is not responsible for typographical errors! ABSOLUTELY NO DEALERS!

UNITEK™

90 DAY FREE FINANCING

The Most Complete Apple® Stores!

Apple® Blow-Out Sale

Authorized Reseller
Authorized Service Provider

NEW

Apple® Power Macintosh™ 6100/66

- 66MHz Power PC 601 Processor
- 256K Cache
- 1MB VRam
- Built-in Ethernet
- 16-Bit Stereo Sound Input & Output
- Monitor & Keyboard not included

8/350
$1659 SALE

NEW

Apple® Power Macintosh™ 7100/80

- 80MHz Power PC 601 Processor
- 256K Cache
- 1MB VRam
- Nine built-in ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB Monitor not included

8/700/CD
$2899 SALE

NEW

Apple® Power Macintosh™ 8100/100

- 100MHz Power PC 601 Processor
- 256K Cache
- 2MB VRam
- Memory Expandable to 264MB
- 256K level-2 cache
- Three NuBus slots
- Ethernet (AAUI)
- Monitor & KB not included

8/700
$3259 SALE

Apple® Power Macintosh™ 8100/110

- 110MHz Power PC 601
- 2MB VRAM
- 256K Level 2 Cache
- Memory expand to 264 MB
- System 7.5

16/2GB/CD
$5789

Apple® Power Macintosh™ 6100/60

- 60MHz Power/PC 601 Processor
- 1MB of VRAM
- Built-in Ethernet
- 16-Bit Stereo Sound Input & Output
- Monitor & Keyboard not included.
- System 7.5

8/250
$1349 SPECIAL BUY

Apple® Power Macintosh™ 7100/66

- 66MHz Power/PC 601 Processor
- 1MB of VRAM
- Nine Built-in Ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB Monitor not included.
- System 7.5

8/500/CD
$2169 SPECIAL BUY

Apple® Power Macintosh™ 8100/80 SOFT WINDOWS

- 80MHz Power PC 601 Processor
- 16MB Memory, 256K Level 1-2 Cache
- 2MB Video VRAM
- Memory Expandable to 264MB
- Insignia™ Softwindows Included
- Monitor & Keyboard Not Included

BEST BUY

LIMITED QUANTITY

16/500/SOFT WINDOWS **$3499**

Apple® Macintosh Quadra® 630

- Motorola 68040 66MHz Processor/33MHz data base
- 8MB RAM • Power PC upgradable
- Includes Communication slots for Ethernet or Fax/Modem
- Video slot for NTSC, PAL, SECAM video input Card
- Monitor & KB not included

4/250
$1059 SALE

Apple® Macintosh Quadra® 950

- Motorola 68040 Processor 33MHz
- Built-in Math Co-Processor
- 5 NuBus slots
- Expandable to 256MB memory

8/230
$2989

Apple® Power Macintosh™ 7100/66 Softwindows

- 66MHz Power/PC 601Processor
- 1MB of VRAM
- Nine Built-in Ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB and Monitor not included
- System 7.5
- 8/500

16/500/Softwindows
$2659 SPECIAL BUY

Apple® Power Macintosh™ 8100/80

- 80MHz Power PC 601 Processor
- 2MB VRAM
- Memory Expandable Expandable to 264MB
- 256K level-2 cache
- Three NuBus slots
- Ethernet(AAUI)
- Monitor & KB not included

SPECIAL BUY 16/500/CD **$3239**

Apple® Power Macintosh™ 8100/80AV

- 60MHz Power PC 601
- 1MB VRAM
- System 7.5
- Monitor & KB not included

16/500/CD/AV
$3559 SALE

NEW

Apple® Power Macintosh™ 6100/66 w/DOS Compatibility Card

- 66MHz Power PC 601 Processor
- 256K Cache
- 1MB VRAM
- Built-in Ethernet
- 16-bit Stereo Sound Input and Output
- Monitor & keyboard not included

16/500/DOS
$2499

Apple® Power Macintosh™ 7100/80AV

- 80MHz Power PC 601 Processor
- 256K Cache
- 2MB VRAM
- 9 Built-in ports
- Expandable to 136MB
- Built-in Ethernet
- Supports All Apple Displays
- KB Monitor not included
- Audio & Video input

16/700/CD
$3439

Apple® Power Macintosh™ 8100/100AV

- 100MHz Power/PC 601Processor
- 256K Cache
- 2MB of VRAM
- Memory Expandable to 264MB
- 256K level-2 cache
- Three NuBus slots
- Ethernet (AAUI)
- Monitor and KB not included

16/1000/CD
$4259

Apple® Power Macintosh™ 7100/66 Upgrade

- To Upgrade Macintosh IIvx, Quadra/Centris 650
- KB & Monitor not included.
- w/Exchange

$1449

Apple® Power Macintosh™ 8100/80 Upgrade

- To Upgrade Macintosh Quadra 800, 840AV
- 2MB VRAM
- KB & Monitor not included
- w/Exchange

$1795

BARGAIN

DAYTEK® 17" Color

- 3 Yr Warranty
- .28 Dot Pitch
- 1280x1024 Res.

NEW
$589

Apple® Macintosh® Color Plus 14" Display

- .28 Dot Pitch
- 640x480 Resolution

$299

Apple® Multiple Scan 15" Display

- .28mm Dot Pitch
- 1024x768 Res.
- Headphone/Speakers input & output

$479

Apple® Multiple Scan 17" Display

- Trinitron Screen
- Digital Control
- 17" Screen

$949

Apple® Multiple Scan 20" Display

- Trinitron Screen
- Digital Control
- 20" Screen

$1939

Apple® Color Stylewriter® Pro

- 360DPI Resolution
- 64 Scalable Truetype Fonts
- Color Sync color Matching Tech

$579 SALE

NEW

Apple® Personal Laserwriter® 300

- 300DPI
- 4 pages per minute
- 1MB of RAM
- w/Toner

$609

Apple® Laserwriter Select® 310

- 300DPI
- 5PPM
- 1.5MB Memory
- Postscript

Limited Time & Quantity SALE **$599**

Apple® Personal Laserwriter® 320

- 300DPI
- 4 Pages Per minute
- 2MB of Ram
- w/Toner

$859 SALE

Apple® LaserWriter Select® 360

- 600 Dot per inch
- 10 Pages Per minute
- 7MB Ram
- Adobe Postscript 2
- w/Toner

$1399 SALE

Apple® LaserWriter™ 16/600PS

- 16 Pages Per minute
- 600 DPI
- Ethernet Built in
- w/ Toner

$2298 BEAT/MEET ANY PRICE*

UNITEK™
computer stores

Lowest Prices Highest Quality

PENTIUM 90

INTEL Pentium 90MHz System

- 8MB Ram, 256K Cache
- 540MB IDE HDD
- Samsung 15" SVGA Monitor NI
- Diamond Speedstar PCI SVGA 1MB
- PCI Integrated IDE & I/O
- TEAC 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

$1945

486DX4-100

INTEL 486DX4-100 CPU

- VLB, PCI, and ISA Slots
- 8MB Ram, 256K Cache
- 540MB IDE HDD
- Samsung 14" SVGA Monitor NI
- Diamond Speedstar PCI SVGA 1MB
- PCI Integrated IDE & I/O
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

$1575

486DXII-66 Multimedia

INTEL 486DXII-66 CPU

- 8MB Ram, 256K Cache
- 420MB Hard Disk
- Samsung 14" SVGA Monitor
- Local Bus 32 Bit SVGA Card 1MB
- IDE/I/O
- 3.5" 1.44 Floppy Drive
- Sound Blaster™ 16 Bit Sound Card
- Double Speed Multisession CD-ROM Drive
- 15 Top Quality CD Titles
- Stereo Amplified Speakers
- Unitek Enhanced 101 Keyboard
- MS Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

$1450

486DXII-66

INTEL 486DXII-66 CPU

- 4MB Ram, 256K Cache
- 420MB Hard Disk
- Samsung 14" SVGA Monitor Local Bus 32 Bit
- SVGA Card 1MB
- IDE & I/O Card
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

$1075

486DXII-50

INTEL 486DXII-50 CPU

- 4MB Ram, 256K Cache
- 420MB Hard Disk
- Samsung 14" SVGA Monitor Local Bus 32 Bit
- SVGA Card 1MB
- IDE & I/O Card
- Teac 3.5" 1.44 Floppy Drive
- UNITEK Enhanced 101 Keyboard
- Microsoft Compatible Mouse, Mouse Pad
- Mid Tower Case w/CPU Fan

$1059

486DX-33

INTEL 486DX-33 CPU

- 4MB Ram, 256K Cache
- 210MB Hard Drive
- 14" SVGA Monitor, .28
- SVGA Card w/1MB
- 3.5" 1.44 Drive
- UNITEK 101 Enhanced Keyboard
- MS Compatible Mouse
- Mini Tower Case

$985

UNITEK™ Clearance Center

Check this Section Monthly for new Deals! At W.LA Store.

Texas Instruments 4000M, 486SX2-50, 4/200, Dual Scan CLR	$1995
Texas Instruments 4000E, 486WIN DX4-75, 4/340, Active CLR	2795
COMPAQ Contura, 4/25CX, 486SL-25, 4/209, Active CLR	2149
SHARP PC-8650, 486SL-33, 4/200, Active CLR	1795
SHARP PC-8650II, 486DX2-50, 4/200, Active CLR	1895
SHARP PC-8660, 486DX2-50, 4/320, Active CLR	1995
IBM ThinkPad 355C, 486SX-33, 4/250, Active CLR	2250
IBM ThinkPad 360, 486SX-33, 4/340, 9.5" LCD	1395
EPSON ActionNote 486SLC2-50, 4/180, $700 Value Software	1145

MULTI-MEDIA KIT

KIT #1 — $229
- Double Speed CD
- Media Vision 16Bit Sound Card
- Pair of Speakers
- 7 CD Titles

KIT #2 — CREATIVE LAB DISCOVERY MULTIMEDIA PACKAGE — $259

KIT #3 — CREATIVE LAB GAME BLASTER MULTIMEDIA PACKAGE — $389

KIT #4 — $499
- Quad speed CD ROM
- TOSHIBA 3501 Quad.
- PRO Audio 16
- Pair of Speakers
- 7 CD's & 8 Titles

UNITEK™
computer stores

W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310 . 820 . 2400
Fax . 310 . 826 . 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax . 818 . 907 . 7799

90 DAY Same As Cash Financing AVAILABLE

UNITEK is a Registered trademark of UNITEK COMPUTER STORES INC. GE Service Protection Plus™ is available to purchase for additional 3yr. warranty. **DOS & Windows sold separately.**
All prices reflect cash discount. Limited time/qty. Intel is a registered trademark of the Intel Corporation.

UNITEK™ computer stores

W. LOS ANGELES
12024 Wilshire Blvd.
West Los Angeles, CA 90025
310.820.2400
Fax . 310 . 826 . 1455

ENCINO
16027 Ventura Blvd.
Encino, CA 91436
818.907.7878
Fax . 818 . 907 . 7799

90 DAYS Same As Cash Financing AVAILABLE

FULL SERVICE CENTER • Open Monday-Friday 9am-6:30pm/Saturday 10am-4pm

LASERJET PRINTERS

HP LaserJet 4L w/Toner	BEST PRICE
HP LaserJet 4ML w/Toner	969
HP LaserJet 4P w/Toner	939
HP LaserJet 4MP w/Toner	1299
HP LaserJet 4 Plus w/Toner	BEST PRICE
HP LaserJet 4M Plus w/Toner	BEST PRICE
HP LaserJet 4V w/Toner 16PPM	1879
HP LaserJet 4MV w/Toner 16PPM	2699
HP LaserJet Color w/Toner	CALL
HP LaserJet 4SI w/Toner	BEST PRICE
HP LaserJet 4SI MX w/Toner	BEST PRICE
HP Jetdirect (NETWORKING) Card	Available

HEWLETT PACKARD
Authorized Reseller

INKJET PRINTERS

Deskjet/Deskwriter 540	$289
Deskjet/Deskwriter 560C	279
Deskjet/Deskwriter 320	309
Deskjet/Deskwriter 320 w/cut sheet feeder	359
Deskjet 1200C & 1200CPS	959/1575
HP Officejet	749

HP MONTH CELEBRATION!

SCANNERS

HP ScanJet IIIP w/CTRL	$499
HP ScanJet IICX w/ISA CTRL	749*
HP ScanJet IICX w/MAC CTRL	749*
HP ScanJet Doc. Feeder	449

*Aft. mfg. rebate

PLOTTERS

HP DraftPro Plus D-Size	CALL
HP DesignJet 200 E-Size	CALL
HP DesignJet 220 D & E Size	CALL
HP DesignJet 600 E-Size	CALL
HP DesignJet 650C D-Size	CALL
HP DesignJet 650C E-Size	CALL
HP DesignJet 650C/PS 36"	CALL

Authorized Dealer & Service Provider

TOSHIBA

BLOWOUT SALE

T1910
486SX-33, 4MB RAM
LCD VGA, Win, DOS, Trackball
NEW
200HD 1299

T1910CS
486SX-33, 4MB RAM
Passive Matrix Color, Win, DOS
200HD NEW...1769

T1960CS
486SX2-50, Passive CLR, 4 MB, Ball point, DOS, Win
200HD 2098
IN STOCK

NEW T1960CT
486DX2-50, Active Color 4MB, Ballpoint, DOS, Win
NEW
200HD 2669
320HD 2849
IN STOCK

NEW T2400CS
486DX2-50, Passive Matrix Color, 4MB Ram, MS Windows F/WorkGroups, Sound Option, Accupoint
NEW
250HD 2699
320HD 2829

NEW T2400CT
486DX2-50, Active Color, 8MB, Sound Option, Accupoint MS Windows F/WorkGroups
250HD 3299
320HD 3359
IN STOCK

T4700CT
486DX2-50, 8MB RAM, 1.44 or, 2-PCMCIA, WIN, DOS, 6.9 lbs.
NEW
200HD 3749
320HD 3999

T4800CT
486DX4-75 Active CLR Screen, 8MB RAM, DOS, Win
500HD .....CALL

T3600CT
486DX2/50, 8MB RAM, 1.44DOS, Win 4 Wrkgroups
250HD 3329

COMPAQ

Authorized Dealer & Service Center

CONTURA AERO 4/33C
486DX-33, 4MB, ACTIVE MATRIX NO FLOPPY
250HD 1859

NEW CONTURA 400C
486DX2-40, 4MB RAM, Passive Matrix, DOS, WIN
250HD 2435

NEW CONTURA 400CX
486DX2-40, 4MB RAM, ACTIVE TFT CLR, DOS, WIN
250HD 3089

LTE ELITE 4/40CX
486DX2-40, 4MB, ACTIVE MATRIX
170HD 3689
340HD 4039

LTE ELITE 4/50CX
486DX2-50, 8MB RAM, ACTIVE TFT CLR, DOS, WIN
340HD 4840

LTE ELITE 4/75CX
486DX4-75, 8MB, ACTIVE MATRIX COLOR
340HD 5539
510HD 5979

CONTURA 4/25C
486SL-25, 4MB, PASSIVE CLR SCREEN, DOS, WIN, Modem
209HDD...1999

COMPAQ DESKTOPS & TOWERS
Prolinea
Prolinea MT & XE
DeskPro
DeskPro XLITE
CALL for Configuration & Price

COMPAQ SERVERS
Proliant 1000
Proliant 2000
Proliant 4000
Prosignia Systems
CALL for Configuration & Price

Authorized Sales & Service

OKIDATA

Available On Site Service

OL400E
- 4PPM
- 300DPI
- 512K RAM
- 100 Sheet Tray

$409

OL 410E
- 4PPm
- 600DPI
- 2MB Ram
- 100Sheet Tray

$539

OL410/PS
- 4PPM
- 600DPI
- 2MB Ram
- Postscript Scalable Fonts
- Mac Compt.
- AppleTalk Built-In

$749

ML320/321
- 300 CPS
- Dot Matrix
- 9 Pin

$319/429

ML590/591
- 360CPS
- Dot Matrix
- 24 Pin
- Color Option

2yr. Warranty
$429/569

DOC IT
- ALL IN ONE
- 8PPM Laser
- FAX Mach'e
- Scanner
- Copier

CALL FOR DEMONSTRATION

NEC

NEC 2V 14"	339
NEC 3V 15"	479
NEC 4FGE 15"	629
NEC 6FGP 21"	1999
NEC XE 15 15"(NEW)	539
NEC XE 17 17"(NEW)	1029
NEC XE 21 21"(NEW)	2069
NEC XP15 15"(NEW)	659
NEC XP17 17"(NEW)	1250
NEC XP21 21"(NEW)	2439

CD-ROM Drives

Multispin 2VI/2V Deluxe	179/299
Multispin 3XP Plus	389
Multispin 4XI/4XE	389/485

ThinkPad 360	170/3401859/2239
ThinkPad 360CS	170/3402285/2665
ThinkPad 360C	170/3402779/2899
ThinkPad 500	85/170...799/1039
ThinkPad 510CS	200 ...2289
ThinkPad 755CS 50MHz	170/340....3289/3699
ThinkPad 755CS 75MHz	170/340....3695/4175
ThinkPad 755C 50MHz	170/340....4299/4825
ThinkPad 755C 75MHz	170/340.....CALL
ThinkPad 755 Series	500MB.....Available

IBM Business Partner
Authorized Advanced Products Dealer

*Due to backorder status of some ThinkPads, Sign up For Back Order List.

IBM is a registered trademark of International Business Machines Corporation
Thinkpad trademark of International Business Machines Corporation

*Price after rebate. Prices subject to change without notice. Limited time & quantity. OAC Ask for Details. Prices reflect cash discount.

HIGH PERFORMANCE! LOW PRICES! COMPARE!

NO Payments/NO Interest for 90 Days!

486/33MHz DELUXE PRO SYSTEM

Tower Case w/LED
486/33MHz CPU (INTEL)
486 VLB Motherboard 256k
4 Megabytes RAM
540 Meg Hard Drive 13ms Access
14" SVGA N.I. Monitor .28Dot
32-Bit VLB Card w/1MEG
32-Bit VLB Controller Card
1.44 High Density Floppy Drive
101 AT Spill Proof Keyboard
Hi-Resolution Mouse & Mouse Pad
2X Dual Spin CD ROM Drive
Sound Blaster 16 Sound Card
Voice Recognition Ready
Dual Stereo Speakers
2 Serial/1 Parallel/1 Game Ports
MS DOS 6.22 & MS Windows 3.1
MICROSOFT ENCARTA '95
MS MONEY, MS WORKS,
MS GOLF, MS ANCIENT LANDS,
MS ENTERTAINMENT PACK

$1199
$28/month

486DX2/66MHz M-PRO SYSTEM

Tower Casew/LED
486DX2/66MHz CPU (INTEL)
486 VLB Motherboard 256k w/Heatsink
4 Megabytes RAM
540 Meg Hard Drive 13ms Access
14" SVGA N.I. Monitor .28Dot
32-Bit VLB Card w/1MEG
32-Bit VLB Controller Card
1.44 High Density Floppy Drive
101 AT Spill Proof Keyboard
Hi-Resolution Mouse & Mouse Pad
2X Dual Spin CD ROM Drive
Sound Blaster 16 Sound Card
Voice Recognition Ready
40W Powered Stereo Speakers
14.4k Data/Fax Modem
2 Serial/1 Parallel/1 Game Ports
Free Trial Prodigy/America On-Line/Compuserve
MS DOS 6.22 & MS Windows 3.1
MICROSOFT ENCARTA '95
MS MONEY, MS WORKS, MS GOLF, MS ANCIENT LANDS,
MS ENTERTAINMENT PACK

$1399
$39/month

486DX2/66MHz MULTIMEDIA DREAM SYSTEM

Tower Case w/LED
486DX2/66MHz CPU (INTEL)
486 VLB Motherboard 256k w/Heatsink
8 Megabytes RAM
540 Meg Hard Drive 13ms Access
15" SVGA N.I. Monitor .28Dot
32-Bit VLB Card w/1MEG
32-Bit VLB Controller Card
1.44 High Density Floppy Drive
101 AT Spill Proof Keyboard
Hi-Resolution Mouse & Mouse Pad
2X Dual Spin CD ROM Drive
Sound Blaster 16 Sound Card
Voice Recognition Ready
DUAL Stereo Speakers
14.4k Data/Fax Modem
2 Serial/1 Parallel/1 Game Ports
Free Trial Prodigy/America On-Line/Compuserve
MS DOS 6.22 & MS Windows 3.1
MICROSOFT ENCARTA '95
MS MONEY, MS WORKS, MS GOLF, MS ANCIENT LANDS, MS ENTERTAINMENT PACK
EPSON INKJET PRINTER 360DPI w/Printer Cable

$1749
$49/month

PENTIUM 60MHz M-PRO SYSTEM

Tower Case w/LED
586-60MHz CPU (INTEL)
PCI Motherboard w/256k
8 Megabytes RAM
810 Meg Hard Drive 11ms Access
15" SVGA N.I. Monitor .28Dot
PCI 64-Bit Video Card w/1MEG
PCI 64-Bit Controller Card
1.44 High Density Floppy Drive
101 AT Spill Proof Keyboard
Hi-Resolution Mouse & Mouse Pad
2X Dual Spin CD ROM Drive
Sound Blaster 16 Sound Card
Voice Recognition Ready
100W Powered Stereo Speakers
14.4k Data/Fax Modem
2 Serial/1 Parallel/1 Game Ports
Free Trial Prodigy/America On-Line/Compuserve
MS DOS 6.22 & MS Windows 3.1
MICROSOFT ENCARTA '95
MS MONEY, MS WORKS, MS GOLF, MS ANCIENT LANDS, MS ENTERTAIN-MENT PACK

$1998
$56/month

PENTIUM POWER!

PENTIUM 90MHz M-PRO SYSTEM

Tower Case w/LED
586 90MHz CPU (INTEL)
PCI Motherboard w/256k
8 Megabytes RAM
810 Meg Hard Drive 11ms Access
15" SVGA N.I. Monitor .28Dot
PCI 64-Bit Video Card w/1MEG
PCI 64-Bit Controller Card
1.44 High Density Floppy Drive
101 AT Spill Proof Keyboard
Hi-Resolution Mouse & Mouse Pad
2X Dual Spin CD ROM Drive
Sound Blaster 16 Sound Card
Voice Recognition Ready
100W Powered Stereo Speakers
14.4k Data/Fax Modem
2 Serial/1 Parallel/1 Game Ports
Free Trial Prodigy/America On-Line/Compuserve
MS DOS 6.22 & MS Windows 3.1
MICROSOFT ENCARTA '95
MS MONEY, MS WORKS, MS GOLF, MS ANCIENT LANDS, MS ENTERTAINMENT PACK

$2289
$68/month

NOTEBOOK SPECIALS!

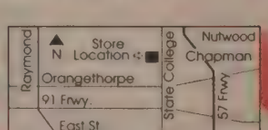
DESCRIPTION:

4 Meg Ram (Upgradable to 32Mb)
3 1/2" Floppy Drive
Built-In Trackball
PCMCIA Slot(TYPE II&III)
DOS 6.2 & Windows 3.11
Built-In Stereo Sound Card
Microphone&Speaker
Removable Hard Drive
NiMH Battery 2.5Hrs.

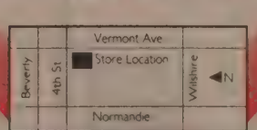
MODEL	SCREEN	HARD DRIVE	486DX/33MHz	486DX2/66MHz	486DX4/100MHz
700 AMC	ACTIVE COLOR 9.4"	250 MB HDD	$2895	$2995	$3249
700 AMC	ACTIVE COLOR 9.4"	340 MB HDD	$2949	$3059	$3319
700 AMC	ACTIVE COLOR 9.4"	540 MB HDD	$3189	$3229	$3599
700 DSC	DUAL SCAN COLOR	250 MB HDD	$2095	$2149	$2439
700 DSC	DUAL SCAN COLOR	340 MB HDD	$2179	$2247	$2548
700 DSC	DUAL SCAN COLOR	540 MB HDD	$2395	$2445	$2789

ViewSonic · NOVACOMM · OPTIQUEST. · Canon · Epson

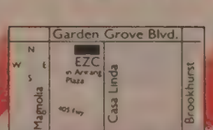
EZ COMPUTER



MAIN BRANCH
521 S. State College,
Fullerton, CA
Tel: 714-447-3955
Fax: 714-447-3945



LOS ANGELES BRANCH
401 S. Vermont Ave., Suite 4
Los Angeles, CA 90020
Tel: 213-380-4431
Fax: 213-380-3974



GARDEN GROVE BRANCH
In the Arirang Plaza
9240 Garden Grove Blvd., Ste. 14
Garden Grove, CA 92644
Tel: 714-534-2530
Fax: 714-534-5229

Business Hours: Mon.-Sat. 10am to 6pm

INTERNATIONAL BRANCH
Sungjin Media International
Korea
Tel: (02)3272-0110
Fax: (02)3272-2835

DISCOVER · VISA · MasterCard

Prices based on cash discount. Not responsible for typographical errors. Prices subject to change without notice.

California's Computer Magazine
MICROTIMES

EDITOR-IN-CHIEF
Dennis Erokan

PUBLISHER
Chuck Stanley

ASSOCIATE PUBLISHER
Amy Marson

EDITORIAL 510-934-3700
email: Microx@well.sf.ca.us
EDITOR Mary Eisenhart
ASSOCIATE EDITOR Michael Robin
NEWS EDITOR Paul Hoffman
ART DIRECTOR Monika Lukenbill
SENIOR DESIGNER Rick Colby
CONTRIBUTING EDITORS Lenny Bailes, John Perry Barlow, Smoot Carl-Mitchell, Jennifer Robin Cherniss, Kathleen Creighton, John C. Dvorak, Jonathan E., Bennett Falk, Mitsu Hadeishi, Peter John Harrison, Ed Kahn, Matthew Leeds, David Morgenstern, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, John S. Quarterman, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren, John Wolcott
CONTRIBUTING WRITERS Mikael Blaisdell, Anna Couey, John Cowan, Rich Grace, Fred Haslam, Fred Lieberman, Woody Liswood, Judy Malloy, Pamela Mason, Kevin Savetz
EDITORIAL ASSISTANT John Downen
CONTRIBUTING PHOTOGRAPHERS Michael Jay, Anne Knudsen, Susana Millman, Paul Winternitz

ADVERTISING 213-851-8600
SALES MANAGER (SO. CAL.) Cynthia Lapporte
SENIOR ACCOUNT DIRECTOR (NO. CAL.) Barry Green
ACCOUNT EXECUTIVES Marty Gillow, Tracy Longo, Ken Marson, Herb Mendelsohn, Debra Siegel, Chloe Vezo
MARKETING MANAGER Carolyn Guerrero
CLASSIFIED & SUBSCRIPTION MANAGER (NO. CAL.) Jennifer Kosta
ADVERTISING SERVICES ASSISTANT
Wendy Sloneker (Northern California)
Michelle Rosendin (Southern California)
CO-OP MANAGER Nick Alvarez

PRODUCTION
GROUP PRODUCTION MANAGER Mary Beth DeSantis
GRAPHIC ARTS MANAGER Gary Sparks
SENIOR PRODUCTION ASSISTANT Matt Matuska
TRAFFIC ASSISTANT Beth Bartels Tarder
PRODUCTION ASSISTANT Caroline Keller
ASSOCIATE DESIGNERS Eleanor Carag, Paul Dorian, Michelle Logan, Tracy McCormack
GRAPHIC ARTS STAFF Randy Atwood, Jennifer Bagwell, Donna Bogener, Linda Burkard, London Cammack, Peter Kowalesyn, Miranda Liss, Michelle Roberts, Lisa Spencer
DIGITAL IMAGING Jesse Coleman
PROOFREADERS Becky Forsyth, Tim Regan

ADMINISTRATION
HUMAN RESOURCES DIRECTOR Erica Stein-Oakley
N.C. OFFICE MANAGER Christine Garcia
N.C. ADMINISTRATIVE ASSISTANTS Leta Jesch, Kerri Neely
L. A. OFFICE MANAGER Raphaella Vaisseau
L. A. ADMINISTRATIVE ASSISTANT Jacqui Tavis

ACCOUNTING/COMPUTER SERVICES
CONTROLLER Linda May
ACCOUNTING Joaquin Arellano, Richard Cook, Vickie Liu, Brian Murray, Bonnie Peterson, Sara Tassione
CREDIT MANAGER Doug Morgan
NETWORK/COMPUTER SUPPORT Jason Boatman, John Dito

DISTRIBUTION 213-851-8600
DISTRIBUTION MANAGER John Erokan
ASSISTANT MANAGER/LA Art Holland
DISTRIBUTION ASSISTANTS Kenny Priest
DISTRIBUTION CLERK Jesse Sullivan
FIELD COORDINATORS Roe Eyth, Frank Grygus
DISTRIBUTION Dennis Anderson, John Clefstad, Don Karr, Juan Lau, Jac Michanovic, Robbie Myers, Curtis Ng, Kelly Orr, Joseph Rafalo, Reliable Circulation, John Dimas Rezendes, Bill Rivera, SPS, Wilfredo Villarroel
PUBLICATIONS *BAM , Drive!, SF Downtown, Home Improvement & Design*

FOUNDERS
Dennis Erokan, Don Hamilton, Pat Hamilton

This Vol. 11 No. 2 February 6, 1995, Whole No. 133. MicroTimes, California's Computer Magazine, is published by BAM Media, Inc., 3470 Buskirk Ave., Pleasant Hill, CA 94523. Phone Advertising Office (510)934-3700. Fax (510)934-7351. email Microx@well.sf.ca.us Los Angeles Office, 6767 Forest Lawn Drive, Suite 110, Los Angeles, CA 90068. Phone (213) 851-8600. Fax (213)851-8303. San Jose Office, 36 Harold Ave., Suite 2, San Jose, CA 95117. Phone (408) 244-4400. Fax (408) 248-4552. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714) 939-2809. Fax (714)978-6135. MicroTimes™ is © 1995 by BAM Media, Inc. Subscription rates: 14 issues, U.S.: 4th Class $35 (Allow 3 to 4 weeks for delivery), 1st Class $65 (Allow 1 to 2 weeks for delivery). MEXICO & CANADA: Surface Mail $50 (Allow 4 weeks for delivery). Air Mail $75 (Allow 1 week for delivery). OVERSEAS: Surface Mail $50 (Allow 6-10 weeks for delivery), Air Mail $178 (Allow 1 week for delivery). To receive sample issues, please send $5 ($6 for overseas) to cover postage costs. Back issues are $6 each. All rights reserved. Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service advertised herein for illegal purposes.

PC WAREHOUSE

Nationwide's TOP 5 leading computer stores

Authorized Service Center for Compaq, IBM, HP, Epson, Panasonic..

COMPAQ Presario
520TVCD...$1595-4/420mb HDD w/TV
920CDTV...$1895..8/420mb HDD w/TV
924CDS.$1795-8/520mb w/CD-ROM

IBM PS/1 486dx2-50...$995
4/340 HDD Desk top case

NEC
Pentium-90...$2695
8mb /560 HDD Tower case

EPSON
486dx2-66...$1295
4 /560 HDD CD-Rom Desk top case

Apple
PowerMac 610/60....$1395
60MHz 8mb /160mb HDD
Performa 630CD $1895

Pentium-90...$1895
Intel CPU P-586-90
8mb/560mb HDD 1.44FDD
PCI 64 bit s SVGA & IDE
Mid-Tower case cooling Fan
586--66Mhz $1495

EPSON Laser 6PPM 512k
$349

Upgrade
286 Upgrade 486-33.$249
Intel CPU 486dx2-66...$159
Upgrade to 486dx2-66...$299
to Pentium 586-90 from..$995

HDD/FDD
WD 1Gmb...$399
WD 810 mb..$299 Maxtor 540..$229
(Gen) 560mb.$189 420mb (12ms) $169
NEC 1.44 mb FDD ..$29 1.2mb ..$39

CD-ROM
Panasonic562.$109
Teac 4xSP From.$229
Toshiba 4xSp.$279
NEC 4xSp 501.$365

NEC
3FGe..$379
4FGe..$439
5FGe..$739
Save
(Renew)- Special price w/1year Warranty

Panasonic
C1491 NI...$249
C1791E(digital)..$749

SONY
1425(14")..$329
151sf..$449
17sf ...$825

Kenitec 14' SVGA .28 mGreen .. $ 185
Kenitec 15' L-R ... $299 17'...$549

Toshiba
"Low price Guaranteed"
(*--B stock w/ 1 year warranty)
T-1960CS * 486dx2-50 4/200..$1895
T-2400CT 486dx2-50 8/250...$3245
T-4800CT 486dx4-75 8/500mb HDD
Sound card built-in Active ..$4695

Powerbook 520 .. $ 2095
Powerbook 540C $4195

NEC 486sx-33S C 4/210..$1495
486dx2-50V 4/250mb .$2495
486dx2-50V 4/340mb Active..$3395
486dx2-50V 4/540mb Avtive...$3695
486dx4-75M 4/340mb Active ..$4395

EPSON 486dx2-50C 4/250..$1945
A-650 486dx2-50....$1495

COMPAQ Aero 4-33C 4/170...$1595
4000C 4/250..$2395
Countura 4000 CX $2995
LTE Elited 440CX Active...$3495
LTE Elite 4/75 8/340 Active...$4795

Canon NoteJet 486slc2-50 4/260 w/Printer Color....$2495

All prices base on cash discount, Availability & Prices are subject to change without notice. Available only at PCWarehouse S.CA.

TempleCity:818-285-6663
5817 Rosemead Blvd.
(At Las Tunas)
Encino: 818-907-6476
15617 Ventura Blvd.
(101 at Haskell)

Gardena: 310-516-2098
1355 W. 190th St.
(405 at Normandie)
Santa Fe Springs:
310-926-7363
13340 Firestone Blvd.

City of Industry:
818-913-7121.
(17405, E.Gale Ave)
Thousand Oaks: 805-379-0181
3835R Thousand Oaks Blvd.
(Westlake Blvd., next to Ralphs)

Finacial Available
90 days
Same as cash

Dunwell

Dunwell Computer *All brand names you need!*
(All wholesale price & Low price Guaranteed)

Panasonic Office Automation CA
P1150..$119
P2130..$169*
P2135..$189*
KX-P3123/3124..$240/319
Kxp-3624..$369
P4400...$369*
P5400...$499
KXP-100 3 in-1..$755

CITIZEN
GSX-220/230..$159/199

SHARP
JX-9460-PS.$675
6PPM,600DPI
2MB, Postscript

hp
DJ--320,.$285
DJ-540...$275
DJ560C...$450
DJ-1200C..$950 OfficeJet.$735
4L...$519* 4P..$905 4+..$1345
4M+.$1835 4V.$1845 4MV.$2645
Scanjet 3P..$469 IIcx..$739*
4SI Color Laser printe....Call

Canon
BJ-10sx...$249
BJ-200e....$229
BJ-230...$375(wide)
BJC-4000..$389 BJC-600e..$445

EPSON 720 DPI
Action 2250...$99
Action3260..$174
LX-300....$159
LQ-570+.....$235
FX-870...$269
FX-1170....$355
LQ-1070+.$365 LQ-1170.$599
Stylus 400..$199 800+.$219
Stylus Color 720 DPI...$499
Action11 /15 /1600.$379/479/755
DFX-5000+..$1345 8000..$2245

IBM
Ink J/color.$249/325
4037E/39..$625/1095

Lexmark 4039-12R+...$1195

*Price After Rebate

DUWELL Wholesale Division
(818) 913-8686 17405 A-1, E.Gale Ave City of Industry
(818) 907-6476 15617 Ventura Blvd ENCINO
(310) 926-0172/516-0413 13340 Firestone Blvd Santa Fe Springs

UNIX COMPUTER SYSTEMS
UNIX - SYS Vr4 - BSD - LINUX - X11R5 - Lemis - Yggdrasil - GNU

INSTALLING: Access to the INFORMATION SUPER HIGHWAY!!!

C & C++ Compilers - Debugger -Editors - Ada - lisp - Prolog - fortran - Eiffel...
Tcpip, UUCP, SLIP, PPP, FTP, Tcl, TK - Games - Utilities - Compilers...
Internet tools - Internet Maps, Mail - News, Servers - Readers...
Supports: multi-tasking - SVGA - Network - Sound - CD ROM -
Hard Drives...Full source code - Online Docs - ManPages - FAQs - RFC's - IENs...

Microsoft
MICROSOFT WINDOWS READY-TO-RUN
CASE LOGIC

STARTING AT $39, SOFTWARE ONLY - COMPLETE SYSTEMS FROM $1495

HACKER ELECTRONICS & COMPUTERS
(818) 882-7980
21010 DEVONSHIRE
CHATSWORTH, CA

BY PAUL HOFFMAN

Industry Insight

The Pentium Fiasco, Round II: Many Ways To Fix What's Barely Broken

More than a month after users demanded action about the well-publicized Pentium bug, Intel gave in and announced that it will replace the CPU chip for anyone who asks for it. In that time, the Pentium's reputation as the processor of choice was irrevocably damaged, and people who never thought twice about Intel's integrity now view the company as recalcitrant and dishonest.

However, the fact remains that the bug in the Pentium's floating-point unit was incredibly rare, unlikely to cause noticeable problems to more than a few people, and easy to fix in software. The bug became a nonissue: Intel's handling of this bug, previous ones, and future ones are all much more important than the bug itself.

Initially, Intel said that the bug would appear in only about one in nine billion calculations, and that even then the result would be correct in many decimal places. A few weeks later, IBM announced that its own research shows that the error was much more common, about one in one hundred million divisions. However, many people question IBM's analysis, since it is based on many unprovable assumptions, e.g. how frequently certain numbers appear in calculations, and what precision those calculations need.

The root of the problem was that Intel forgot to put some entries in a lookup table that controlled how the division was performed. The table of 2048 entries had five entries missing. These missing entries could cause the result of the calculation to shift a small amount, possibly becoming more or less wrong depending on the two numbers in the division. To fix the problem, Intel simply filled in those entries in the table and created new silicon for the Pentium. (The best technical description of the bug appears in the December 26 issue of *Microprocessor Report*.)

Intel has now agreed to replace all faulty Pentium CPUs with the fixed versions for the life of the processor. This replacement will not happen immediately, since Intel has only shipped enough "good" processors to replace a small fraction of the "bad" ones out there. Also, the replacement process might be painful, depending on the manufacturer of the computer the Pentium came in.

For example, if a PC has the Pentium in a standard socket, it is unlikely that an untrained person can remove it without damaging the motherboard. Many Pentium systems came with the CPUs in ZIF (zero insertion force) sockets that make replacing the CPU easy enough for an individual to do, but the process might still be difficult, depending on the CPU's position on the motherboard. If the Pentium is soldered or otherwise permanently attached to the motherboard, the entire motherboard has to be replaced; clearly, this has to be done by the manufacturer, not the end-user.

The bug became a non-issue: Intel's handling of this bug, previous ones, and future ones are all much more important than the bug itself.

Intel has an additional headache: all Pentiums need some form of air cooling, and different manufacturers used different types of cooling systems. Many used custom heat sinks, and using a different heat sink might void a PC's warranty. Intel says all of these details will be worked out soon, but don't assume that you can just call Intel and have it mail you your new CPU. Intel is also making all customers give it a credit card number that will be charged if the old CPU is not sent back, thereby preventing a black market for the old CPUs.

In fact, unless you are sure you need the replacement because you need the high precision on divisions all the time, you should probably choose not to do the replacement at all. By the time Intel has the replacement program set up, all major software affected by the Pentium bug will have patches that circumvent the bug. Microsoft and Lotus already have patches for Excel and 1-2-3 available, as do many other software vendors. Applying these patches is incredibly less time-consuming, and probably much safer, than taking your PC into a service center for the CPU to be replaced.

Microsoft and other vendors of programming languages are also making patches available for their compilers. Any program compiled with the patched software will automatically detect possibly dangerous divisions and perform them in a safe fashion. In fact, Microsoft's compiler solution uses very fast tests and, even in cases where a possible error might occur, very fast changes are made to avoid the bug. Within a few months, the vast majority of software that might be materially affected by the bug should be fixed to avoid it.

The Pentium bug (Intel humorously insists on calling it a "flaw") is forcing people to look at one of the hard, cold facts of life with CPUs: they're full of software. The bug was not caused by an errant wire, a speck on silicon die, or a flaw in the manufacturing process. The cause is much more mundane: someone at Intel didn't copy the full table correctly, and they didn't test the chip well enough

OPEN 7 DAYS

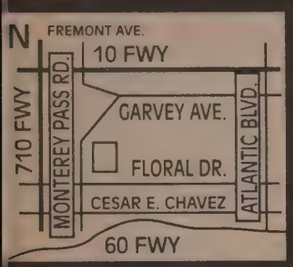
Computer Pacer

PERFORMANCE · INSURANCE · COMMITMENT · ACCURACY · RELIABILITY

1460 Monterey Pass Rd. #B, Monterey Park, CA 91754

MON — FRI 9am-6pm • SAT 10am-3pm • SUN 1pm-5pm

PHONE: (213) 262-1087 FAX: (213) 264-1481



AMERICAN EXPRESS · MasterCard · VISA

Financing Available

Have you looked at your local Yellow Pages recently? It's not as thick as it was 3 years ago. The recession had a lot to do with it but businesses fail in good times and bad. Why? There are many reasons:

- Not enough money to survive during the bad times.
- Offering products and services that haven't kept up with technology or demand.
- Selling products that are of inferior quality.

You may not have heard of Computer Pacer USA, but it's been in business for over 8 years – almost half the life of the personal computer industry.

Service and reliability are the keys to customer satisfaction. We're here to answer your questions. When you want new products or services, we make sure the products are dependable and powerful. We guarantee good service and deliver a product with a good value. We don't charge too much.

Computer Pacer's specialty is computers that meet the customer's needs – a first time buyer or a corporation.

Over the years the company has grown but the tradition of service and quality continues. Computer Pacer customers count on it. You can too!

We Accept
Government Purchase Orders
30 Days — 45 Days

- **Free 3 Button Serial Mouse**
- **Free CD w/System Purchase**

WHO'S WHO REGISTRY 1994-1995

Thank You For Choosing Us:

City of Monterey Park
County of Los Angeles
DWP
Honeywell
NBC
U.S.C.

CUSTOM CONFIGURATIONS AVAILABLE

PERIPHERALS

FAX/MODEMS

- 2400 Internal Modem w/ phone cable and software.....$39
- 9600 Fax/2400 Int. Modem w/ phone cable and Superfax software for Windows.....$45
- 14,400 Int. Fax Modem .32, .42 w/ phone cable and Winfax Lite.....$62
- Voice Activated Fax Modem 14,400/14,400.....$89

ADD ON CARDS

- 32 Bit VL-Bus IDE I/O Enhanced.....$29
- ATI PCI 64-Bit 16.7 Million Color Super VGA Graphic Card w/One Meg.....$149
- 32 Bit VL-Bus Graphic Card Expandable to 2MB.....$79

HAND SCANNER FOR WINDOWS

Windows-based Photo Deluxe image processing software converts black & white images into 256 greyscale images; includes GO-OCR software; features side-mounted buttons and rear wheels for easy scanning.....$119

NETWORKS

Novell Netware.....CALL
Ethernet Network Card 16 bit.....$49

ACCESSORIES

Power Center Surge Protector.....$28

KEYBOARDS

101 Enhanced Keyboard w/Deskcover.....$28
Keytronic 101 Enhanced Keyboard.....$38

POWER SUPPLIES/UPS

200 Watt UL.....$38
230 Watt.....$38

CASES

Vertical Case w/P/S.....$47
Desktop Case w/P/S.....$69
Deluxe Vertical w/250 P/S.....$79
Heat Sink Fan.....$9

486 Intel-33DX

Pacer Superior

- 486DX 33MHz w/256K Cache Vesa Local Bus
- 2MB RAM, Exp. to 32MB
- Upgradable to 66
- Intel Overdrive Ready
- AMI BIOS, 8 Expansion Slots
- Math Coprocessor Built-in
- TEAC 1.44 High Density 3 1/2" Floppy
- 270 Meg Hard Disk Drive
- 32 Bit VESA Local Bus Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- Vertical or Desktop Case
- 230 Watt Power Supply
- Hi Color Super VGA Graphic Card 1024x768
- 14" Super Hi-Res VGA Color Monitor Tilt Swivel 1024x768 .39 dp
- Space Saver 101 Enhanced Keyboard
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

ONLY $899 Complete

486DX2-66

Pacer Senior

- 80486 DX2 66 VL Bus w/256K Cache
- 4MB RAM, Exp. to 128MB
- Intel 486DX2-66 CPU
- Heat Sink
- Intel Overdrive Socket Ready
- Green 3 VL Bus Slots
- Intel Verified
- TEAC 1.44 High Density 3 1/2" Floppy
- 420 Meg IDE Hard Disk Drive
- 32 Bit VL Bus Dual/Hard Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 32 Bit VL Bus 16.7 M Color Super Graphics Accelerator w/1 Meg exp. to 2 Meg on board
- 14" Energy Saving Non-Interlace Super VGA Color Monitor w/Tilt and Swivel 1024x768 .28 dp
- Space Saver 101 Enhanced Keyboard
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

ONLY $1,068 Complete

The Graphics Maker

- 80486DX2-66 VL Bus w/256K Cache
- 8MB RAM, Exp. to 128MB
- Intel 486DX2-66 CPU w/Heat Sink
- Intel Overdrive Ready
- Intel Verified
- Green 3 VL Bus Slots
- TEAC 1.44 High Density 3-1/2" Floppy
- 540 Meg IDE Hard Disk Drive
- 32 Bit VLB Dual H/T Controller
- AT I/O (2 Serial, 1 Parallel, 1 Game)
- 32 Bit VLB 16.7M Color Super Graphics Accelerator w/1 Meg Exp. to 2 Meg on Board
- Deluxe Vertical or Desktop Case
- 230 Watt Power Supply
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- Cables and Manuals

ONLY $1,398 Complete

PCI/ISA DX2-66

Super Pacer

- PCI/ISA w/256K Cache
- Intel 486DX2-66 CPU w/Heat Sink
- 8MB RAM Exp. 112MB
- Intel Verified
- TEAC 1.44 High Density 3 1/2" Floppy
- 540 Meg Hard Disk Drive
- PCI Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- PCI 64 Bit Super Graphic Accelerator w/1 Meg 16.7 Million Colors Expandable to 2 Meg
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- Cables & Manuals

ONLY $1,488 Complete

Pentium™

PCI 4X CD Multimedia

- Intel Pentium 60MHz CPU
- Cooling Fan
- 8 Expansion Slots
- 256K Cache, Exp to 512K Cache
- 8MB RAM, Exp. to 132MB
- TEAC 1.44 High Density 3 1/2" Floppy
- 535 Meg Hard Disk Drive
- PCI Dual Hard/Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical or Desktop Case
- 250 Watt Power Supply
- ATI PCI 64 Bit Video Super Graphics Accelerator Card w/1 Meg 16.7 Million Colors
- Quad Speed CD ROM
- Sound Blaster 16 Bit Stereo Compatible Sound Card, Sound Software
- 2 Volume Adjustment Sound Speakers
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- Cables & Manual

ONLY $2,049 Complete

Multimedia Machine

- 80486DX2-66 VL Bus w/256K Cache
- 8MB RAM, Exp. to 128MB
- Intel 486DX2-66 CPU w/Heat Sink
- Intel Overdrive Ready
- Green 3 VL Bus Slots
- Intel Verified
- TEAC 1.44 High Density 3-1/2" Floppy
- Volume/Balance Control
- 72 Watts Amplifier, 20 per Channel
- Built-in Speakers Chassis w/Power Supply
- 420 Meg IDE Hard Disk Drive
- 32 Bit VLB Dual H/T Controller
- 32 Bit VLB Super Graphics Accelerator w/One Meg
- Double Speed CD ROM w/250ms Access time
- Kodak CD Compatible
- CD ROM Interface Card
- SoundBlaster 16 Bit Stereo Compatible Sound Card
- Sound Software
- 15" Energy Saving Super VGA Color Monitor w/Tilt and Swivel 1280x1024 .28 dp
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Space Saver 101 Enhanced Keyboard
- 14,400/14,400 fax Modem w/phone cable and Winfax software for Windows

FREE 3 Button Serial Mouse
FREE 200 Games Multimedia CD Disk

ONLY $1,568 Complete

FEBRUARY SPECIALS

Multimedia Bundle

2X Double Speed (300K) Valuable Kit $228
- Sony 33A CD ROM Compatible (300ms)
- True 16 Bit Stereo Sound Card
- Pre Amplified Stereo Speakers
- 12 CD Titles

2X Sound Blaster Multi CD 16 $248
- Panasonic 563 2X CD ROM (300ms)
- Sound Blaster 16 Bit Stereo Sound Card
- Pre Amplified Stereo Speakers & Microphone
- 15 CD Utilities Titles

4X Teac Quad Speed (195ms/600K) $348
- Sound Blaster 16 Bit MCD Stereo Sound Card
- Pre Amplified Speakers
- 14 CD Titles (Compton's Interactive Encyclopedia '95)

4X Toshiba SCSI (155ms/600K) $448
- Sound Blaster 16 Bit SCSI Stereo Sound Card
- Pre Amplified Stereo Speakers
- 14 CD Titles (Compton's Interactive Encyclopedia '95)

Multimedia Special

Sony Double Speed CD ROM 250ms, External Sound Speakers, Sound Blaster 16 Bit, Stereo Compatible Sound Card Sound Software

$198

Deluxe CD Titles:

Encyclopedia	Might & Magic	-US Atlas
-RoboCop 3D	-D/Generation	-Chessmaster 3100
-Ocean F-29	-Contraption Zack	-World Atlas
-Pushover	-Chessmaster 2100	-Mavis Beacon
-Epic	-Life & Death II	Teaches Typing

$39

17" Super VGA Color Monitor w/Tilt and Swivel

only **$479**

- TERMS C.O.D., Cash & Company POs on approval
- Prices do not include shipping
- Prices subject to change without notice
- Listed names of products are registered trademarks of their respective companies
- Pacer USA is a trademark of Power Tech Farmington
- One Year Warranty Parts & Labor
- Advertised prices reflect a cash discount

Pentium™ Power Pacer Barracuda

- Pentium™ Intel™ 90Mhz CPU w/Cooling Fan
- 90Mhz PCI/ISA Motherboard w/256K Cache
- 8 Expansion Slots
- 4 PCI, 2 VESA, 3 ISA Slots
- 8MB RAM Exp. to 128MB
- 256K Cache, Expandable to 512K Cache
- Teac 1.44 3-1/2" High Density Floppy Drive
- 420 Meg Hard Disk Drive
- PCI 64 Bit Dual Hard and Floppy Controller
- 2 Serial, Parallel, Game
- New Generation Deluxe Vertical Case or Desktop Case
- 250 Watt Power Supply
- ATI PCI Mach 64 Bit Super Graphic Accelerator Card w/1MEG 16.7 Million Colors
- 17" Non-Interlaced Energy Saving Super VGA color Monitor
- 101 Enhanced Keyboard w/Dust Cover
- Microsoft Serial 3 Button Compatible Mouse
- 8" x 10" Mouse Pad
- Cables and Manuals

ONLY $2,299 Complete

before committing it to silicon.

Software written by humans fails all the time. One major lesson from this episode is that you shouldn't rely on any software too much, even if it is in hardware. The people who started losing sleep over the Pentium bug should be mortified by all of the likely bugs in the software they use. Even if you write your own software, it must be compiled by other software before you can run it.

If you trust the folks writing the compilers more than you do the folks putting together Intel's CPUs, you might want to compare the age of the typical compiler coder at Microsoft (many of whom are fresh out of college) to the typical chip designer at Intel. If a mistake similar to the Pentium bug had been made in the library for a compiler, what is the chance that it would have been detected? Does any software company run as many tests on the output of their compilers as any of the CPU companies do on their hardware?

Regardless of how important the bug really was, or how easy it is to fix in software or in hardware, Intel clearly failed in its duty to its customers. Intel hid the bug until it became common knowledge. Worse yet, Intel still insists that it will not reveal whether there were any bugs that were silently fixed in previous revisions of the Pentium (or of any of its CPUs, for that matter), nor will it necessarily announce any new bugs that it finds. Thus, until Intel becomes more open and honest about bugs which are inevitable anyway, users will always suspect the results they get from any Intel CPU. Unfortunately, Intel's initial handling of the problem should make them all the more suspicious.

Software written by humans fails all the time. One major lesson from this episode is that you shouldn't rely on any software too much, even if it is in hardware.

The #1 Source in the Valley For All Your Computer Needs!

U.S. Robotics Sportster 14.4 Fax
V42 & V42bis
High speed data and fax
Ultra low cost, ultra high performance!!
Comes complete with QuickLink II Software
US Robotics 28.8k Int. $225
$99

ATI Graphics Xpression
Best Priced 64 Bit Windows Accelerator
2 Megabytes of Fast DRAM
1280 x 1024 Non-Interlaced Resolution.
Up to 16.7 MILLION Colors @ 800x600 @ 75Hz!!
High Speed PCI or VL Configurations.
Hercules Dynamite VLB 1Mb $149
$209

KFC 15" Monitor
Up to 1280x1024NI Resolution
Front Panel Digital Controls
Horz. & Vert. Size & Position,
Trapezoid, Pincushion,
AND Rotation Controls
KFC 14" $225
$315

Conner Tapestor 420Mb Tape Drive
Up to 420Mb of storage on QIC-Wide tapes!!
Uses existing floppy-drive contoller
Installs in 3.5" or 5.25" drive bay
QIC-80 and Irwin Compatible
Full featured DOS & Windows Software
Tapestor 850 $279
$179

Creative Labs MultiMedia Office
Double Speed CD-rom Drive 320ms 300kb/sec!
Sound Blaster 16 bit stereo, CD quality Sound card!
Includes Microsoft Office Professional 4.3
and Microsoft Encarta!
Teac 4xi w/SB16 & Speakers $339
$525

Clearance
64mb SIMM
$2125
32mb SIMM
$975
AMI DX-50 EISA/VLB
$650
While Supplies Last. Serious Inquires Only.

Video Boards

ATI	
Graphics Pro Turbo 2mb/4mb	$369/589
Graphics Ultra Pro VLB/PCI 2mb	$275
Graphics Expression PCI/VLB/ISA	$209
Winturbo PCI/VLB	$298
DIAMOND	
Viper Pro 2mb/4mb VLB or PCI	$399/549
Stealth 64 2mb VLB/PCI VRAM	$329
Stealth 64 4mb VLB/PCI VRAM	$469
HERCULES	
Dynamite VLPro 1mb/2mb VLB	$149/$199
Dynamite Pro ISA 1mb/2mb ISA	$159/$199
Dynamite Power PCI/VLB w/2MB	$219
Graphite Terminator 2/4mb	$339/489
NUMBER NINE	
GXE64 2mb VLB/PCI	$252
GXE64 Pro 2/4mb PCI/VLB	$358/539
OTHERS	
Cirrus Logic 1mb VLB	$79
Trident 1mb ISA	$69

Drive Controllers

DTC 2280 ISA IDE I/O	$19
DTC 2278 VLD IDE I/O	$29
Acculogic PCI IDE	$39
Future Domain 8bit SCSI	$39
Adaptec 1510/1520/1540	$64/69/189
Adaptec 2940 PCI SCSI	$289
Adaptec 2940W	$349
Adaptec 2842 VL	$239

Keyboards

101 Enhanced Keyboard	$29
Focus 2001	$45
Fujitsu Keyboard	$49
Spillproof Keyboard	$39

Mice/Joysticks

Dexxa Serial Mouse	$25
Mach 1 Plus	$19
Mach 3	$29
MS Mouse Serial	$39
Dexxa Cordless Contolier	$35
Flight Stick	$59
Virtual Pilot Yoke	$65

Scanners

HEWLETT PACKARD	
Scanjet 3p	$489
Scanjet IIcx w Calera / Photostyler	$949
MICROTEK	
Scanmaker IIsp	$759
Scanmaker IIhr	$1083
Scanmaker III	$2288
UMAX	
UC630 PC PRO SCSI 24 Bit Color	$689
UC840 PC PRO 1600 Dpi 24 Bit Clr	$875
UC1260 PC PRO 2400 Dpi Color	$1094

Hard Drives

270Mb IDE	$159
420 Mb IDE	$189
540Mb IDE	$229
1 Gig IDE w Controller	$479

Fax/Modems

Supra 14.4k Int.	$79
U.S. Robotics 14.4k Int	$99
☞ Cardinal Wintel 19.2k Int.	$79
U.S. Robotics 14.4k Ext.	$119
Best Data 28.8k Ext	$179
U.S. Robotics 28.8k V.34 Int	$225

Networking
Novell Certified Staff Available

Multi-Media

CREATIVE LABS	
Sound Blaster 16 Value Ed./MCD	$98/138
Sound Blaster 16 SCSI II	$169
Sound Blaster 16 SCSI II ASP	$189
Sound Blaster 32 AWE Value	$225
Wave Blaster II Daughter Board	$179
Discovery CD 16 Kit	$259
Digital Schoolhouse	$279
Game Blaster CD 16 Kit	$375
Digital Edge CD-Rom Kit	$669
TEAC	
Quadspeed Internal CD-ROM	$209
LOGITECH	
☞ Soundman Wave	$119
NEC	
QuadSpeed Internal 4xi	$389

Monitors

MAG	
DX15/MX15F 15" SVGA	$359/449
☞ DX17 17" SVGA	$649
NEC	
XE15	$559
XP15	$679
XE17	$1029
VIEWSONIC	
ViewSonic V6E 14"	$269
ViewSonic 15ES/V15	$339/399
ViewSonic 17E/17G/V17	$689/719/829
Mitsubishi	
Diamond Pro 15FS	$459
Diamond Scan 17FS	$939
Diamond Scan 26H	$8499
OTHERS	
KFC 15" 1280x1024 SVGA	$315
KFC 17" 1280x1024 SVGA	$649

We Carry It All !!
22129 Sherman Way
Canoga Park, CA 91303 (818) 347-8324
Prices quoted based on 3% cash discount.
Pricing and availability subject to change without notice.

R-TECH
Computer Sales & Service
(818) 34R-TECH
(818) 347-8324

Macintosh Clones May Not Be What You Expected

Apple made two important announcements in December about other vendors being able to manufacture clones of the Macintosh computer. The real effect of the announcements won't be known for more than a year, but one thing is quite clear: Apple has finally heard the call to allow some cloning of the Macintosh.

The first announcement was probably of less interest to most Mac users, but may have a much larger effect on the long-term growth of the Macintosh market. Apple has created a new multimedia platform, called Pippin, based on the PowerPC CPU and a

BINOMIAL SYSTEMS

957 Fairway Drive, Walnut, CA 91789
TEL: (909) 595-8293 ; FAX: (909) 598-4609

Store Hours:
Mon-Fri: 9AM-8PM
SAT: by appointment

NOVELL — Novell Certified NetWare Engineer — ARTISOFT

NETWORK CARDS

3COM

Ethernet 10 Base-T or Coax

3C503 Etherlink II ISA 16-bit	189.00
3C509 Etherlink IIB ISA 16-bit	129.00
3C509 Etherlink IIB ISA 16-bit Combo	149.00
3C529 Etherlink III MCA 32-bit	249.00
3C579 Etherlink III EISA 32-bit	249.00

3COM CARD ONLY w/o Manuals

3C509 Etherlink IIB 16 Coax	105.00
3C509 Etherlink IIB 16 10 BT	89.00
3C509 Etherlink IIB 16 Combo(Qty >4)	119.00
3C579 Etherlink III 32-bit EISA	229.00

Token Ring

3C619 Tokenlink III 16/4 ISA 16-bit	439.00
3C629 Tokenlink III 16 MCA	479.00
3C679 Tokenlink III 16/4 EISA 32-bit	589.00

ADDTRON

Arcnet

ARC-120 ISA 8-bit Combo	55.00
ARC-220 ISA 16-bit Combo	75.00

Ethernet 10 Base-T

AE-100UL TN ISA 16-bit Jumperless	35.00

Ethernet Coax

AE-100 II ISA 16-bit (Novell Cert.)	35.00

Ethernet Combo

AE-200LC ISA 16-bit 2-in-1 (Nov. Cert)	45.00
AE-200UL ISA 16-bit 2-in-1 Jumperless	49.00

ARTISOFT

Ethernet 10 Base-T or Coax

NodeRunner 2000 ISA 16-bit	179.00
NodeRunner 2000 MCA	269.00
NodeRunner 2000/A ISA 16-bit Combo	239.00
NodeRunner/M 2000 ISA 16-bit	89.00
NodeRunner/M 2000/A ISA 16 Combo	109.00

D-LINK

Ethernet 10 Base-T or Coax

D-Link BNC Adapter	79.00
D-Link BNC & 10 Base-T Combo	90.00
D-Link PCI Combo (RJ45/BNC)	199.00
D-Link VLBUS Combo (RJ45/BNC/AUI)	299.00
D-Link MCA Combo Adapter	189.00
D-Link EISA Combo (RJ45/BNC/AUI)	295.00

INTEL

Ethernet 10 Base-T / Coax

EtherExpress 16 ISA 16-bit	119.00
EtherExpress 16 ISA 16-bit Combo	139.00
EtherExpress 16 PRO/10 16 Bit TP	119.00
EtherExpress 16 PRO/10 16 Bit Combo	139.00
EtherExpress 16 PRO/10 Flash	139.00
EtherExpress 16 PRO 10/100 PCI	239.00
EtherExpress 16 ISA Flash	125.00
EtherExpress 16 MCA 32-bit	189.00
EtherExpress 32 EISA Flash	249.00

Intel CARD ONLY w/o Manuals

EtherExpress 16 16-bit Coax	79.00
EtherExpress 16 16-bit 10 Base T	109.00
EtherExpress 16 ISA 16-bit Combo	129.00
EtherExpress 16 ISA Flash	129.00
EtherExpress 16 PRO/10 16-bit TP	109.00
EtherExpress 16 PRO/10 16-bit Combo	129.00
EtherExpress 16 PRO/10 Flash	119.00
EtherExpress 16 PRO/10 Flash Combo	129.00

NOVELL EAGLE / MICRODYNE

Ethernet 10 Base-T / Coax

NE2000 Plus ISA 16-bit	95.00
NE2000 Plus -3 ISA 16-bit Combo	109.00
NE/2C MCA	265.00
NE3200 EISA 32-bit	499.00
NE3210 EISA 32-bit	189.00

Token Ring

NTR2000 TR ISA 16-bit	319.00

SMC

Ethernet 10 Base-T / Coax

Elite 16-Ultra ISA 16-bit	115.00
Elite 16-Ultra ISA Combo (RJ45/BNC)	129.00
Elite 32-Ultra ISA Combo (RJ45/BNC)	239.00
Ethercard Plus Elite 16 ISA 16-bit	125.00
SMC EtherPower Combo	189.00

SMC CARD ONLY w/o Manuals

Elite 16-Ultra ISA 16-bit Coax	109.00
Elite 16-Ultra ISA 16-bit 10 Base T	99.00
Elite 16-Ultra ISA Combo	119.00
Ethercard Plus Elite 16 ISA 16-bit	119.00

NETWORK CARDS

ALLIED TELESIS

1500 Plus DMA 16-bit Ethernet 10 TP	89.00
1500 Plus DMA 16-bit Ethernet Combo	109.00
1700 Plus ASIC 10 TP	89.00
1700 Plus ASIC Combo (BNC/10 TP)	109.00
1702 Plus MCA 10 TP	139.00
1702 Plus MCA Combo (BNC/10 TP)	169.00

ASANTE

EtherPac 2000+N 16-bit Ethernet Coax	109.00
EtherPac 2000+T 16-bit Ethernet 10 TP	89.00
EtherPac 2000+3 16-bit Ethernet Comb	139.00
EtherPac 2203 EISA Ethernet Combo	359.00

HEWLETT PACKARD

HP JETDIRECT 16-bit Ethernet Coax	359.00
HP JETDIRECT 16-bit Ethernet 10 TP	359.00
HP JETDIRECT for Token Ring	699.00

IBM

IBM Lan 16-bit Ethernet Coax	99.00
IBM Lan 16-bit Ethernet 10 Base T	89.00
IBM Lan 16-bit Ethernet Combo	119.00

NETWORK - FAST 100 Mbps

(Bring 100 Mbps to Your Network!)

HEWLETT PACKARD-100 Mbps VG

HP 100 Mbps Network Cards:	
Selectable ISA 16-bit 10/100 VG	349.00
Selectable EISA 32-bit 10/100 VG	449.00
HP 100 Mbps Network Hub:	
Advancestack 100 VG 15 Port Hub	2,999.00

INTEL - 100 Mbps - 100 Base T

Intel EtherExpress PRO 10/100 PCI	239.00
Intel EtherExpress PRO 10/100	379.00
Cables : Plenum Twisted Pair - Category 5	
Every 25-ft Plenum 10 Base T Cable	19.00
Category 5 KeyStone Wall Plate	9.00

NETWORK SOFTWARES

ARTISOFT

Articom Modem Sharing Software	299.00
Artisave Tape Back Up Software	249.00
Central Station II for Printers & Modems	439.00
CorstreamServer 5 Users w/o Lan 6.0	749.00
CorstreamServer 10 Users w/o Lan 6.0	1,469.00
CorstreamServer 25 Users w/o Lan 6/0	2,389.00
Lantastic for OS / 2 1 User	99.00
Lantastic for OS / 2 5 Users	459.00
Lantastic for OS / 2 10 Users	819.00
Lantastic for OS / 2 25 Users	1,399.00
Lantastic 6.0 1 User	69.00
Lantastic 6.0 5 Users	349.00
Lantastic 6.0 10 Users	649.00
Lantastic 6.0 25 Users	1,299.00
Lantastic 6.0 50 Users	2,179.00
Lantastic 6.0 1 User Upgrades	36.00
Lantastic 6.0 5 Users Upgrades	99.00
Lantastic 6.0 10 Users Upgrades	145.00
Lantastic 6.0 25 Users Upgrades	349.00
Lantastic 6.0 50 Users Upgrades	569.00
Lantastic 6.0 2 Users Starter Kit	239.00

* Includes: 2 NodeRunner/SI 2000 Coax Cards
2 Users Lantastic 6.0 Software, 25 ft Coax

MICROSOFT

Windows for Workgroup DOS Add-On	48.00
Windows for Workgroup WINDOW Add-On	48.00
Windows for Workgroup 3.11 Full Version	149.00
Windows NT Workstation V3.5	329.00
Windows NT Server V3.5	699.00

NOVELL

Personal NetWare 1.0 (For Dos & Window)	75.00
Novell Netware 3.12 Documentation	179.00
Novell Netware 4.X Documentation	179.00
NetWare 3.12 5 Users	595.00
NetWare 3.12 10 Users	1,249.00
NetWare 3.12 25 Users	1,995.00
NetWare 3.12 50 Users	2,995.00
NetWare 4.1 5 Users (New Version)	695.00
NetWare 4.1 10 Users (New Version)	1,595.00
NetWare 4.1 25 Users (New Version)	2,295.00
NetWare 4.1 50 Users (New Version)	3,095.00
NetWare 4.1 100 Users (New Version)	4,995.00

Novell NetWare 100 Users Call

NETWORK CD-ROM Server

The Easiest Way to Network CD ROMs

DISCPORT for Ethernet Coax/10 TP $ 699.00

For Novell Netware 3.11 or Higher !

NETWORK HUBS

3COM

LinkBuilder FMS 12 Port Hub	649.00
LinkBuilder 12 Port Hub (3C6211)	995.00
LinkBuilder FMS II 12 Port	649.00
LinkBuilder FMS II 12 Port Mgmt	995.00
LinkBuilder MSH 10BT Hub(3C18000)	2,499.00

ADDTRON

4 Port Arcnet Passive Hub	15.00
8 Port Arcnet Coax Active Hub	125.00
8 Port Arcnet Twisted Pair Active Hub	135.00
8 Port Ethernet 10 Base-T Hub	139.00
16 Port Ethernet 10 Base-T Hub	299.00

ALLIED TELESIS

4 Port Ethernet 10 Base T Hub [MR410T]	229.00
8 Port Ethernet 10 Base T Hub [MR810T]	349.00
12 Port Ethernet 10 Base T Hub w/SNMP [3612TR]	899.00

BOCA RESEARCH

BOCA Hub 16 TP Port Hub	249.00
BOCA Hub 24 TP Port Hub	829.00

NOVELL EAGLE

Eagle Hub 8 Port Hub	339.00
Eagle Hub 12 Port Hub	559.00

HEWLETT PACKARD

AdvancedStack 12 2600A	769.00
AdvancedStack 24 2601A	1,195.00
8 Port EtherTwist	359.00

SMC

8 Port Elite 3608 Concentrator	329.00
12 Port Elite 3512 Concentrator	599.00
12 Port Elite 3612 TP Active Hub	699.00
TigerHub TP6 6RJ45/1AUI 6 Port Hub	199.00
TigerHub TP6B 6 Port Hub	239.00
TigerHub CX3 3 Port Hub	339.00
TigerHub TP12	449.00
TigerHub CX6	659.00
TigerHub FL6	1,489.00

SYNOPTICS

16 Port 2800 Hub(16 RJ45/ 1 AUI)	639.00
16 Port 2804 Hub(16 RJ45/1 FOIRL)	959.00
8 Port 800 Hub	319.00
8 Port 810M Mgm. Hub (Plug & Play)	639.00

NETWORK REPEATERS

ADDTRON

2 Port Coax / Thick Repeater	359.00
4 Port Coax / Thick Repeater	499.00
5 Port (2 BNC / 3 Coax) Repeater	299.00

ALLIED TELESIS

Fiber to BNC Repeater	599.00
4 Port Coax Repeater(4 BNC & 1 AUI)	1299.00

C-NET

Repeater-2 BNC, 1 AUI	449.00
Repeater-2 BNC, AUI, & Fiber Optic	719.00

IMC NETWORKS

BNC to BNC Repeater [52-10242]	323.00
BNC to RJ-45 Repeater	369.00
BNC to AUI Repeater	499.00

TUT

Systems Repeater - 4 BNC / 1 AUI	390.00

NETWARE ROUTERS

3COM

NetBuilder Remote Office	1,789.00

CAYMAN SYSTEMS

GaytorStar IHR 10 Base-T Router	3,949.00

COMPATIBLE SYSTEMS

RISA Router 3000E Router	2,299.00

DIGITAL EQUIPMENT CORP.

BRouter 90TI Router	2,499.00

HEWLETT PACKARD

Ethernet Router s/SNMP	5,539.00

NOTEBOOK ETHERNETS

(Parallel Port Adapter)

3Com Etherlink IIIB PCMCIA 10 TP	259.00
3Com Etherlink IIIB PCMCIA Combo	309.00
Addtron Pocket Ethernet 10 TP	149.00
GVC Pocket Ethernet 10 TP & Coax Combo	159.00
SMC EtherNote Pocket 10 TP & Coax	239.00
SMC Elite PCMCIA 10 TP	199.00
SMC Elite PCMCIA 10 TP & Coax Combo	249.00
Xircom Pocket Ethernet 10 TP	269.00
Xircom Pocket Ethernet 10 TP & Coax	319.00
Xircom CreditCard 10 TP	239.00
Xircom CreditCard 10 TP & Coax Combo	269.00

FILE SERVER HARD DRIVE

MICROPOLIS FAST SCSI II

(5 Yrs Manufacture Warranty)

1.05 GB [4410] SCSI-II 8.5ms	649.00
1.7 GB [2217] SCSI-II 10ms	1059.00
2.0 GB [4221] FAST SCSI-II 9ms	1,199.00
3.6 GB [1936] SCSI-II 11.5 ms	1,999.00
4.29 GB [3243] FAST SCSI-II 8ms	2,559.00
9.09 GB [1991] FAST SCSI-II	3,999.00

CONNER

1.06 GB [1060S] SCSI-II 10 ms	599.00

HEWLETT PACKARD

1.05 GB [C3323SE] SCSI-II 8 ms	899.00

SCSI-II CONTROLLERS

ADAPTEC

AHA-1522AK Adapter w/ Kit	139.00
AHA-1542CF Adapter w/ Kit	299.00
AHA-2842C VL-BUS Adapter w/ Kit	259.00
AHA-2940W PCI Adapter w/ Kit	599.00
Mini SCSI Adapter for	199.00
SlimSCSI Adapter for	239.00

NETWORK FAX SERVER SOFTWARE

FAXServer V2.0 NLM 10 User	339.00
FAXServer V2.0 NLM 25 Users	469.00
FAXServer V2.0 NLM 50 Users	599.00

INTEL Net SatisFAXtion

(The best Communication Product for LAN)

Net SatisFaxtion Fax Server V3.0 25 User	789.00
Net SatisFaxtion Fax Server V3.0 1000 User	1,059.00
SatisFaxtion 400 Int 14.4Kbps Fax Modem	299.00
SatisFaxtion 400 Ext 14.4Kbps Fax Modem	359.00

REMOTE COMMUNICATION GATEWAY

4 Port LAN Expander	1,295.00
LAN Access Server, 4 MB	1,459.00
LAN Access Server, 8 MB	1,619.00

SHIVA

LanRover 4/E-4 Users (BNC/AUI/10 BT)	2,569.00
LanRover 4/T-Token Ring	3,369.00
LanRover 8/E-8 Users (BNC/AUI/10 BT)	3,669.00

U.S. ROBOTICS

Lan Modem 28.8 w/ Dial Routing	1,599.00
Communication Server 386	1,519.00

DIGIBOARD

2 Port for Windows	195.00
PC/4E w/ Conn	459.00
PC/8E w/ Conn	595.00
PC/16EM System	995.00
EISA C/16 w/ Conn	1,449.00
ISA EPC/16 16 Port Multiport w/ Conn	1,895.00

NETWARE CONNECT

NOVELL

Novell Netware Connect 2 Port	439.00
Novell Netware Connect 8 Port	1,595.00
Novell Netware Connect 32 Port	4,395.00

NETWORK UPS SYSTEMS

AMERICAN POWER CONVERSION

Back UPS System 600	299.00
Back UPS System 900	415.00
Smart UPS System 600	409.00
Power Chute Plus Software for NLM	69.00

TRIPP-LITE

BC-600 UPS System Lan	289.00
BC-900 UPS System Lan	389.00
Omni 600 UPS System Lan	359.00
Power Alert Software for NLM	65.00

NETWORK CABLES/TOOLS

Cables

25 Feet RG58A/U Coaxial Cable	8.00
25 Feet RG62 Coaxial Cable	12.00
25 Feet 10 Base-T Twisted Pair (Level 4)	8.00

Connectors

50 Ohm BNC Terminator (Thin Ethernet)	2.00
93 Ohm BNC Terminator (Arcnet)	2.00
T-Connector	2.00
RJ-45 Connector	.69

Tools

BNC Crimping Tool	25.00
RJ-45 / RJ-11 Crimping Tool	29.00
RG-58 / 62 Wire Stripper	25.00

NETWORK PRINT SERVER

EAGLE

Eagle NPE400 Ethernet Combo	369.00

HEWLETT PACKARD

HP Jet Direct TP/BNC	437.00

INTEL

Intel NetPort II Ethernet	417.00
Intel NetPort Express XL Ethernet Combo	479.00

XIRCOM

Pocket Ethernet Print Server	294.00
Ethernet Print Server-1P BNC or RJ-45	299.00

NETWORK TRANCEIVERS

ADDTRON

Thick to Thin Tranceiver	55.00
Thick to 10 Base-T Tranceiver	55.00
Fiber Optic Mini Tranceiver	CALL !!

ALLIED TELESIS

ENET Trans 1 BNC & 1 AUI [AT-257]	329.00
ENET Trans 1 AUI & 1	359.00
ENET Trans 1 AUI & 1 FOIRL	219.00

IMC NETWORKS

IMC Networkds Lanceiver w/ Vampire	115.00

RACAL INTERLAN

InterLan Piercing 1 Port Thick	99.00
InterLan Micromau AUI to RJ-45	49.00

SONIC SYSTEMS

Sonic Systems AUI to BNC & RJ-45	85.00
Sonic Systems AUI -2x to RJ-45	105.00
Sonic Systems AUI -2x to BNC	105.00

NETWARE RAIDION SYSTEMS

MICROPOLIS

Microdisk AV 1050 1.05GB External	1,349.00
Microdisk AV 1760 1.76GB Ext w/Software	1,629.00
Microdisk AV 3020 3.02GB External	2,899.00
Microdisk LS 2100 2.1GB Ext w/Software	2,159.00
Microdisk LS 3020 3.02GB External	2,799.00
Microdisk LT 1050 1.05GB External	1,269.00
Microdisk LT 1760 1.69GB External	1,549.00
Raidion 4200 3-2 1GB External SCSI-II	6,799.00
Raidion 6040 3-3 2GB External SCSI-II	11,659.00

CONNER CRA-RAID

RAID 4GB External SCSI-2 PCI	6,699.00
RAID 6GB External SCSI-2 PCI	8,899.00
RAID 8GB External Hardware PCI	9,599.00
RAID 12GB External Hardware PCI	12,999.00
RAID 4GB External SCSI-2 EISA	6,799.00
RAID 6GB External SCSI-2 EISA	8,999.00
RAID 6GB External Hardware EISA	9,699.00

NETWORK TAPE BACKUP

CHEYENNE SOFTWARES

ARC Serve 1 User	159.00
ARC Serve 5 Users	269.00
WINDOWS 5 Users	269.00

COLORADO MEMORY SYSTEMS

250 MB Internal Tape Backup	169.00
350MB Internal Tape Backup	189.00
700MB Internal Tape Backup	279.00
Trakker 250MB External	299.00
Trakker 350MB External	349.00
Trakker 700MB External	439.00
Powertape 2GB Internal	955.00
Powertape 2GB External	1,279.00
Powertape 4GB Internal	1,299.00
Powertape 4GB External	1,599.00
Powertape NLM 5 Users	319.00
Powertape NLM 20 Users	669.00
Power DAT 6000 4GB Internal	1,295.00
Power DAT 6000 4GB External	1,595.00

CONNER

Python 2GB Internal Tape Drive Only	699.00
Python 2GB External Drive Only	1,099.00
Python Turbo 4GB Internal Drive Only	1,099.00
Python Turbo 4GB External Drive Only	1,199.00
Tapestor DAT Internal 2GB & NLM	1,161.00
Tapestor DC6000, 1.3 GB Kit	1,027.00
Arcada BackUp Software for	
Arcada Backup Software for	
Arcada BackUp Software for	

EXABYTE

FS1G 1.5GB Tape Internal	795.00
FS1G 1.5GB Tape External	949.00
8200 5GB Internal	1,995.00
8200 5GB External	2,295.00
8500 10GB Internal	2,795.00

LOCAL / WIDE AREA BUSINESS NETWORK SOLUTIONS

We specialize in the following areas:

1. *Complete Novell NetWare Installation*
2. *Network Cable Installation*
3. *On-Site Service & Training*
4. *Network Maintenance Contracts*
5. *CNEs to serve your needs*

NOVELL — 3Com — TRIPP LITE — ARTISOFT

ESI FILE SERVERS

PENTIUM-90 Mhz	$1,859.00
PENTIUM-66 Mhz	$1,759.00
PENTIUM-60 Mhz	$1,659.00
486DX2-66 Mhz	$1,199.00

* Motherboard w/ 256K Cache
* Amount of Memory 70ns
* Monochrome Card
* 14" Monochrome File Server Monitor
* Super IDE & I/O Card (2S 1P 1G)
* Seagate IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Mini-Tower File Server Case w/ UL Power Supply
* 101-Enhanced Keyboard
* 16 bit Novell Certified Network Card

ESI WORKSTATIONS

486DX2-66 Mhz	$799.00
486DX-33 Mhz	$729.00
486SX-33 Mhz	$695.00
386DX-40 Mhz	$429.00

* Motherboard w/ Cpu
* 4MB of Memory 70ns
* Monochrome Card
* 14" Monochrome Monitor
* 101-Enhanced Keyboard
* Mini-Tower Workstation Case w/ Power Supply
* 1.44MB Teac Floppy Drive
* 16 bit Novell Certified Network Card

ESI SUPER SYSTEMS

486DX2-66 Mhz	$1,199.00
486DX-50 Mhz	$1,259.00
486DX-33 Mhz	$1,139.00
486SX-33 Mhz	$1,099.00

* VL-BUS Motherboard w/ 256K Cache
* 4MB of Memory 70ns
* Super VGA Card w/ 1MB
* 14" Super VGA Monitor, .28mm
* Super I/O Card (2S 1P 1G)
* Seagate IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Microsoft Compatible Mouse w/ Pad
* Mini-Tower Case w/ 200 Watts Power Supply
* 101-Enhanced Keyboard

PENTIUM SYSTEMS

PCI PENTIUM-90 Mhz	$2,199.00
PCI PENTIUM-66 Mhz	$1,999.00
PCI PENTIUM-60 MHz	$1,899.00

* Pentium Motherboard w/ 256K Cache
* Amount of Memory 70ns
* Diamond Stealth 64 VRAM
* 14" Super VGA Monitor, .28mm
* PCI IDE & I/O Card (2S 1P 1G)
* Seagate IDE Hard Drive
* 1.44MB Teac Floppy Drive
* Microsoft Compatible Mouse w/ Pad
* 101 Enhanced Keyboard
* Mini-Tower Case w/ 200 Watts Power Supply

NETWORK YOURSELF

Complete package to connect 2 computers

Includes 2 Network Operating Softwares
2 16-bit Ethernet Cards
25 ft Coax Cable & Terminators

Lantastic 6.0 (Dos & Windows)	179.00
Windows for Workgroup 3.11 Full Version	376.00
Window for Workgroup 3.11 Add-On	199.00
Personal NetWare 1.0 (Dos & Windows)	229.00
NetWare Lite 1.1	179.00

*All prices are subject to Change without prior notice

!!! Government, School & Corporate P.O.s are WELCOME !!!

MicroTimes Index Begins '95 In Bullish Fashion

EXCH	COMPANY		TICKER SYMBOL	CLOSING PRICE 12/16/94	CLOSING PRICE 01/18/95	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL DIVIDEND RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE											
OTC	Adobe		ADBE	33.50	32.31	-1.19	-3.54	129	0.20	0.62	38.50	21.50
OTC	Autodesk	(H)	ACAD	38.25	37.50	-0.75	-1.96	29	0.24	0.64	41.50	21.88
OTC	Borland	(L)	BORL	8.38	7.75	-0.63	-7.46	-	0.00	0.00	15.13	6.00
OTC	Informix	(H)	IFMX	26.94	33.00	6.06	22.51	36	0.00	0.00	33.00	14.25
OTC	Lotus		LOTS	39.75	43.00	3.25	8.18	-	0.00	0.00	86.50	29.75
OTC	Microsoft		MSFT	63.38	65.06	1.69	2.66	33	0.00	0.00	65.13	39.00
OTC	Novell		NOVL	16.13	17.88	1.75	10.85	29	0.00	0.00	26.63	13.38
OTC	Oracle		ORCL	38.50	43.25	4.75	12.34	37	0.00	0.00	46.50	26.25
OTC	Software Publishing		SPCO	4.50	5.00	0.50	11.11	-	0.00	0.00	7.75	3.00
OTC	Symantec	(H)	SYMC	17.88	20.38	2.50	13.99	120	0.00	0.00	20.38	9.88
	HARDWARE											
OTC	Apple	(H)	AAPL	37.25	45.63	8.38	22.48	18	0.48	1.05	48.06	24.63
OTC	AST Research		ASTA	14.63	15.19	0.56	3.85	101	0.00	0.00	33.00	10.38
NYS	Compaq	(H)	CPQ	38.63	43.38	4.75	12.30	15	0.00	0.00	44.38	26.75
NYS	Digital Equipment		DEC	34.75	36.75	2.00	5.76	-	0.00	0.00	37.50	18.25
OTC	Dell		DELL	38.38	46.88	8.50	22.15	20	0.00	0.00	47.38	19.13
NYS	Hewlett-Packard	(H)	HWP	95.88	106.38	10.50	10.95	17	1.20	1.13	106.38	71.88
NYS	IBM	(H)	IBM	70.13	77.25	7.13	10.16	22	1.00	1.29	77.25	51.38
NYS	Silicon Graphics		SGI	29.63	32.75	3.13	10.55	32	0.00	0.00	33.13	18.75
OTC	Sun Microsystems	(H)	SUNW	34.13	34.63	0.50	1.47	15	0.00	0.00	37.63	18.25
NYS	Xerox		XRX	97.25	104.13	6.88	7.07	17	3.00	2.88	112.75	90.63
NYS	Tandy	(H)	TAN	46.75	50.25	3.50	7.49	20	0.72	1.43	52.38	30.75
	CPU'S											
NYS	Advanced Micro Devices	(H)	AMD	23.13	32.13	9.00	38.92	9	0.00	0.00	32.13	18.50
OTC	Intel		INTC	59.50	69.38	9.88	16.60	13	0.24	0.35	73.50	56.00
NYS	LSI Logic		LSI	41.63	43.25	1.63	3.90	26	0.00	0.00	45.38	16.75
NYS	Motorola	(H)	MOT	56.25	62.50	6.25	11.11	24	0.40	0.64	63.00	42.13
	COMMUNICATIONS											
NYS	AT&T		T	51.63	49.00	-2.63	-5.08	16	1.32	2.69	57.13	47.25
NYS	BellSouth Corp.		BLS	53.88	54.88	1.00	1.86	20	2.76	5.03	63.50	50.50
OTC	MCI		MCIC	18.25	18.94	0.69	3.77	15	0.10	0.53	28.38	17.25
NYS	Northern Telecom		NT	32.75	34.00	1.25	3.82	30	0.36	1.06	37.75	26.00
NYS	Pacific Telesis	(L)	PAC	29.13	29.25	0.13	0.43	27	2.18	7.45	33.75	28.00

KEY: NYS = NEW YORK ASE = AMERICAN OTC = OVER THE COUNTER
(H) = NEW HIGH REACHED IN PERIOD (L) = NEW LOW REACHED IN PERIOD

MARKET DIARY:

ADVANCES	26
DECLINES	4
UNCHANGED	0
NEW HIGHS	11
NEW LOWS	2

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER	Hewlett-Packard	$ 10.50
LARGEST DOLLAR LOSER	AT&T	$ -2.63
LARGEST PERCENTAGE GAINER	Advanced Micro Devices	38.92 %
LARGEST PERCENTAGE LOSER	Borland	-7.46 %

	CLOSE 12/16/94	CLOSE 01/18/95	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	5370.37	5832.57	462.20	8.61
DOW JONES INDUSTRIAL AVERAGE	3807.19	3928.98	121.79	3.20
STANDARD & POOR'S 500 INDEX	458.80	469.72	10.92	2.38
N.Y.S.E. COMPOSITE	250.54	255.97	5.43	2.17
NASDAQ COMPOSITE	729.07	772.38	43.31	5.94

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
05/27/94	4709.29	3757.14
06/24/94	4238.94	3636.94
07/22/94	4577.29	3735.04
08/19/94	5070.19	3755.11
09/16/94	5323.66	3933.35
10/27/94	5478.47	3875.15
12/16/94	5370.37	3807.19
01/18/95	5832.57	3928.98

Copyright Nordby International Inc., Boulder, Colorado

This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International assumes no liability for any inaccuracies. For information on Nordby's customized financial research services, call 1-800-926-7404.

Investors, choosing to focus on the positive effects of economic growth vis-á-vis higher interest rates which usually accompany such growth, bid technology stocks sharply higher to start the new year. When the books were closed on the entire monthly trading session, here is how our basket of high-tech stocks fared: The MicroTimes Stock Index swelled 462.20 points, or 8.61%, en route to a close of 5832.57. Of the stocks that make up our indicator, advancing issues towered over declining issues by nearly a 7-to-1 ratio, with eleven of the stocks hitting new 52-week highs vis-á-vis two stocks that fell to new lows.

In comparison, the Dow Jones Industrial Average plowed through the 3900 level to close above that mark for the first time since October, 1993. In fact, the Dow Jones Industrial Average jumped 121.79 points, or 3.2% last month before coming to rest at 3928.98.

Chip makers continued to ride their popularity wave during the last thirty days and no stock climbed higher last month than Advanced Micro Devices. The reasons: The company settled all legal disputes with rival Intel, the company's current strong momentum should carry over into 1995 due to strong demand for personal computers, and improved availability of AM486 microprocessors among other things. The result: AMD's stock price rocketed $9 a share, or 38.9%, en route to a new 52-week high of $32.13.

Intel, with its Pentium processor problems seemingly behind it, also rallied robustly last month. Specifically, Intel's share price leapt $9.88 a share, or 16.6%, to conclude matters at $69.38.

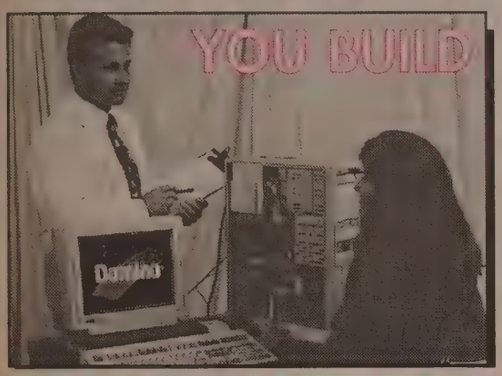
Dell Computer also rewarded its shareholders handsomely last month, as it rose $8.50 a share (22.2%) to $46.88. The stock rallied strongly after Intel said it would replace its Pentium chips to Dell's customers free of charge. Also last month, Dell completed the conversion of its Pentium-based OptiPlex product line to Intel's updated Pentium processor. ■

1GB HARD DRIVE $445

Domino COMPUTER

INTEL 486/DX2/66 V-L BUS ZIF w/ CPU $289

BUILD YOUR OWN COMPUTER - WITH OUR TRAINED TECHNICIANS



17" SVGA NI MONITOR
Digital Control, Flat Screen, On Screen program
$579
(while supplies last)

DOMINO WILL CUSTOM BUILD YOUR COMPUTER FOR YOU

INTEL 486/DX2/66 MultiMedia System

- 4 MB RAM
- 1.44 MB F.D.
- 420 MB H.D.
- 1 MB SVGA Card
- 14" SVGA NI Monitor
- Mini Tower
- 101 Enh. Keyboard
- 25, 1P, 1G, Ports
- Serial Mouse & Pad
- Dual Speed CD-ROM
- Sound Blaster 16 Compatible
- 6 CD Titles
- Stereo Speakers

$1289

MULTIMEDIA 4X BUNDLES

- TEAC 4X Quad Speed CD-ROM
- Sound Blaster 16 Compatible
- 6 CD Titles
- Stereo Speakers

$349

SPECIALS

PENTIUM 90

- PENTIUM 90 MHZ CPU
- PENTIUM PCI MOTHERBOARD
- 256 K CACHE
- 8 MB 72 PIN RAM
- 540 MB HARD DRIVE
- 1.44MB FLOPPY DRIVE
- PCI IDE
- PCI WINDOWS ACCELERATOR W/1MB
- 101 ENHANCED KEYBOARD
- 2 SERIAL, 1 PARALLEL, & 1 GAME PORT
- SERIAL MOUSE
- COMPACT MID-TOWER CASE

$1777

* Monitor Not Included

486/SLC/33 COMPLETE SYSTEM

- 2 MB RAM
- 420 MB Hard Drive
- IDE
- 2 SERIAL, 1 PARALLEL, & 1 GAME PORT
- 1.44MB Floppy Drive
- SVGA Card
- SVGA Monitor
- 101 ENHANCED KEYBOARD
- Mouse + Pad
- Mini Tower

$699

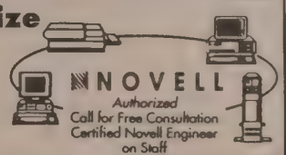
PARTS/SPECIALS/MOTHERBOARDS

- 486 VESA Local Bus 30/72 Pin ZIFF socket Motherboard $109
- VESA Local Bus SVGA Card, with 1 MB $69
- 420 MB Hard Drive $199
- 540 MB Hard Drive $239
- High Speed I/O Card w/16550 UART. . $39
- 14.4/14.4 Voice Fax Modem with phone answering system $89
- 1 GB IDE Hard Drive $445
- Network Card NE2000 Compatible Combo $39
- INTEL 486/DX2-66 V-L Bus ZIFF socket w/CPU. $309
- Pentium PCI/66/90 Motherboard. . . . . CALL
- 250 Tape Back-up Drive $189

CORPORATE CUSTOMERS:

On Our Maintenance Contracts
Call for a FREE On-Site Evaluation
of Your On-Site Hardware & Support

We Specialize in NOVELL AND UNIX Networks



DOMINO is SPECIAL!

Most LAN system integrators don't know PC hardware, & most PC resellers don't know LANs. **DOMINO does it ALL!** As a NOVELL GOLD RESELLER, we are in a position to provide COMPLETE SOLUTIONS and TOTAL SUPPORT.

- **For details contact your nearest DOMINO CENTER**
- **For High level LAN & WAN enterprise Solutions call Edward Wang, Enterprise CNE @ (818) 340-7490.**

SOUTHERN CALIFORNIA DOMINO BUSINESS CENTERS:

Novell Certified NetWare Engineer | Novell Enterprise CNE | Novell Gold Authorized Reseller | Novell Authorized Unix Master

TORRANCE
2535 237th St. Suite102
310/325-9701
Open Sunday by Appt.

CANOGA PARK
22330 Sherman Way Suite C7
818/340-7490

YORBA LINDA
3920 Prospect Ave. Suite F
714/579-0808
Open Sunday by Appt.

IRVINE
17145 Von Karman Ave.
Suite 106
714/252-8494

CLAREMONT
975 W. Foothill Blvd.
909/482-4600
Open Sunday by Appt.

Leasing Program Available for PC & Network Systems over $2000

We are not responsible for typographical errors. Prices subject to change without notice.

Domino COMPUTER

Your Neighborhood Workshop Service and Upgrade Center

MACRO COMPUTER
16025 E. Gale Ave., #A-14, City of Industry, CA 91745
Tel (800) 860-8278
Fax (818) 330-4846

486 DX2 66 MULTIMEDIA
- Intel CPU, 256K Cache up to 512
- Pentium overdrive ready w/zif
- 8MB RAM, Upg to 128MB
- 1.44 MB TEAC Floppy Disk Drive
- 540MB Hard Drive
- 32 Bit VLB IDE Ctrl w/2S/1P/1G
- 32 Bit VLB Windows
- Accelerator Video Card w/1MB
- 15" .28NI SVGA Mon.
- 2x Speed Panasonic CD-ROM
- 16 Bit Sound Blaster Card
- 14 Popular CD Titles
- Amplified Stereo Speakers
- Mid Tower Case w/230 watt P.S.
- 101 Enhanced Keyboard
- High Resolution Mouse

$1399

PENTIUM 90 PCI SYSTEM
- Intel CPU, 256K Cache up to 1MB
- 8MB RAM, Upg to 128MB
- 1.44 MB TEAC Floppy Disk Drive
- 540MB Hard Drive
- PCI IDE Controller w/2S/1P/1G
- Diamond Stealth 64 Bit PCI
- Windows Accelerator w/2MB
- 15" .28NI SVGA Mon.
- Mid Tower Case w/230 watt P.S.
- 101 Enhanced Keyboard
- High Resolution Mouse

$1829

ADD 2x Speed Panasonic CD ROM, 16 Bit Sound Blaster Card, 14 CD Titles, Amp. Stereo Speakers

$2049

486 DX2 66 MHz SYSTEM
- Intel CPU, 256K Cache up to 512
- Pentium overdrive ready w/zif
- 8MB RAM, Upg to 128MB
- 1.44 MB TEAC Floppy Disk Drive
- 540MB Hard Drive
- 32 Bit VLB IDE Ctrl w/2S/1P/1G
- 32 Bit VLB Windows
- Accelerator Video Card w/1MB
- 15" .28NI SVGA Mon.
- Mid Tower Case w/230 watt P.S.
- 101 Enhanced Keyboard
- High Resolution Mouse

$1199

Same System w/4MB RAM

$1059

PENTIUM 90 w/4X CD-ROM
- Intel CPU, 256K Cache up to 1MB
- 16MB RAM, Upg to 128MB
- 1.2 & 1.44 MB TEAC Floppy Disk Drive
- 730MB Hard Drive
- PCI IDE Controller w/2S/1P/1G
- Diamond Stealth 64 Bit PCI
- Windows Accelerator w/2MB
- 4x Quad Speed CD-ROM
- 16 Bit Sound Blaster Card
- 115 Watts Amplified Stereo Speakers
- 17" .26NI MAG 1280x1024 Mon.
- Full Tower Case w/250 watt P.S.
- 101 Enhanced Keyboard
- High Resolution Mouse

$2899

16025 E. Gale Ave., #A-14,
City of Industry, CA 91745
Tel (800) 860-8278

STORE HOURS:
MON-FRI 9:00-7:00, SAT 10:00-6:00

Industry Insights *continued*

high-speed CD-ROM drive. Basically, Pippin is a Mac clone without the keyboard, monitor, or floppy drive. It is meant to run educational and game software on a television set, although it can display on current computer monitors as well.

What's a computer without a keyboard? Ask the tens of millions of Nintendo and Sega users. Apple realized that most CD-ROM software didn't require a keyboard at all, and it didn't need the high resolution of a computer monitor. Cutting out the high-price items of the system allowed Apple to create the Pippin specification, which will allow manufacturers to create systems that cost under $500 and are competitive with the high end of the home game market.

Pippin will be much more than a game machine, however. Apple designed Pippin's system software to be so much like the current Macintosh's that most of today's Mac CD-ROM titles can be converted to Pippin in less than a week. Further, future software that is Pippin-compatible will be Mac-compatible, meaning that most of the new Mac CD-ROMs will run the same on both systems. Bandai, a large second-tier game manufacturer in Japan, has already announced that they will have a Pippin system ready by the end of this year.

Basically, Pippin is a Mac clone without the keyboard, monitor, or floppy drive.

Of course, this is merely what Apple says will be the case, and it could easily be wrong. Apple has a poor track record of having its new system software predictions be accurate, particularly when it comes to glowing descriptions of the ease of porting from one system to another. On the other hand, Apple got the respect of many of its Macintosh developers by making the transition to PowerPC Macintoshes almost transparent to users of nearly all of the current 68000-based software. Until the Pippin hardware platform is widely distributed, many CD-ROM software manufacturers remain skeptical, and even fearful that they will have to support two similar but visually different platforms off of the same disk.

The other licensing announcement was that Apple has made deals with at least one US manufacturer allowing them to make clones of PowerPC Macintoshes. Although this got more press coverage than Pippin, it seems unlikely that these clones could be priced competitively enough against Apple's offerings to make them too attractive to people who have completely linked the names "Apple" and "Macintosh" in their minds. The first US licensee is a startup company with no track record, which is not a good sign.

One of the likely early clone makers will be Radius, which will probably create high-end graphics workstations using its video technology. Such a system might be price-competitive with a similar Apple system, but this is a small niche market. If someone is about to shell out over $7000 for a high-end system, they are not likely to give the money to a company with a reputation for abandoning whole product lines and stranding customers; Radius will have to overcome its reputation for poor technical support, particularly in its online forums. ■

DON'T PAY RETAIL!!

LIFETIME LABOR WARRANTY!!!

P5-60MHz PENTIUM
$1,699

- Pentium 586 Intel CPU
- 256K Write-Back Cache
- 8MB Ram Exp. to 128MB
- 540MB Hard Disk
- PCI Diamond Stealth 64 2MB VGA Card
- PCI Controller
- Medium Tower Case
- 1.44 MB FDD TEAC
- CPU Cooling Fan
- SVGA 15" Monitor (NI .28MM) by Impression or CTX
- Mouse
- 101 Enhanced Keyboard

P5-66MHz PENTIUM
$1,799

P5-90MHz PENTIUM
$1,999

S P E C I A L
SOUNDBLASTER CD ROM Package

Panasonic Double Speed CD-ROM
12 CD Titles including Grolier Encyclopedia
SoundBlaster16 MCD
6 Watt Speaker

$239

TEAC QUAD SPEED CD ROM

SoundBlaster 16 MCD

$299

Best Buy!

NOTEBOOKS
Novacomm

$949

4MB Ram
120MB Hard Drive
9.5" Backlit

Upgrade to 200MB Hard Drive **$999**

Best Buy!

TOSHIBA QUAD SPEED CD ROM SCSI HARD DRIVE

560MB IDE

$199

3.5" x 1" HT
12MSec Access
256K Buffer

SoundBlaster 16 SCSI **$399**

486DX2-66MHz
486DX-33MHz
$989/$899

- 256K Write-Back Cache
- CPU Cooling Fan
- 4MB RAM
- 420MB Harddisk (12MS)
- Mini Tower Case
- 1.44MB Floppy Drive
- VLB Super IDE & I/O
- VLB 1M Video
- SVGA 14" Monitor (.28MM NI)
- 101 Enhanced Click Keyboard
- 3 Button Hi-Re Mouse

Best Buy!

MULTI-MEDIA SYSTEM

M486DX2/66MHz.....$1,259
M486DX/33MHz.....$1,169

- Double Speed CD ROM Panasonic
- 16 Bit Sound Card
- Amplified Speaker
- CD Titles 12 Package
- 256K Write-Back Cache CPU Cooling Fan
- 4MB Ram & Up To 64MB
- 420MB Harddisk (12MS)
- Mini Tower Case
- 1.44MB Floppy Drive VLB Super IDE & I/O
- VLB 1M Video
- SVGA 14" Monitor (.28MM NI)
- 101 Enhanced Click Keyboard
- 3 Button Hi-Re Mouse

RAM Memory

1M SIMM MODULE (1 X 9)	$CALL
4M SIMM MODULE (72 PIN)	$CALL
8M SIMM MODULE (72 PIN)	$CALL
16M SIMM MODULE (72 PIN)	$CALL

PRINTERS

HP 540 INKJET	$279
560C	$479
Epson LQ570	$239
Okidata 400e	$425 *

ACCESSORIES

Panasonic CD-ROM Double Speed	$129
25 watt Amplified Speakers	$32
14400 Baud Fax Modem	$69
250MB (Conner) Backup Drive	$149
16 Bit Sound Card w/12 CD Titles	$99
Logitech Mouse	$29
Microsoft Mouse	$29

* Aft. Mfg. Rebate $75

HARD DISKS

270MB IDE	$159
340MB IDE	$169
420MB IDE	$189
540MB IDE	$229
1GB IDE	$449
1.2, 1.5GB SCSI	$Call

MONITORS

Mono VGA 14"	$99
SVGA 14" (0.39mm)	$189
SVGA 14" (0.28mm)	$209
SVGA 14" (0.28mm NI)	$219
SVGA 15" (0.28mm NI)	$319
SVGA 17" (0.28mm NI) (1280x1024)	$629

WE CARRY MANY NAME BRANDS INCLUDING:

HEWLETT PACKARD
NEC
TOSHIBA
ViewSonic
CTX
...AND MORE!

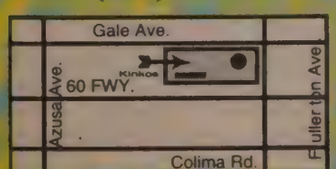
Financing Available
Corporate Accounts Welcome
MON-FRI 10-7, SAT 10-6

*Computek is not responsible for any typographical errors. · *Price Based On Cash Discount. Prices subject to change w/out notice.

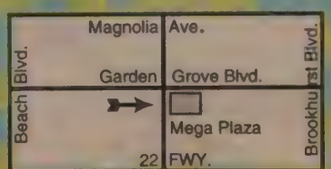
CompuTek

WE SERVICE ALL COMPUTERS

CITY OF INDUSTRY
HOT ORDER LINE 1-800-970-7477
18230 Gale Ave.
City of Industry, CA 91748
TEL. (818) 965-7477
FAX (818) 965-7077



GARDEN GROVE
9042 Garden Grove Blvd. #100
Garden Grove, CA 92644
TEL. (714) 741-9494
FAX (714) 741-9498



SOUTH BAY
15900 Crenshaw Blvd. #F
Gardena, CA 90249
TEL. (310) 380-6677
FAX (310) 380-6678

Syntax Manufacturing & Distribution Since 1986

Intel Pentium PCI

- Intel 64Bit PCI bus-master and ISA slots
- 256K write-back cache
- 8MB DRAM, upgradable to 128MB
- Mid-tower case w/250W power supply
- 540MB IDE HDD w/128K buffer
- PCI Enhanced-IDE controller
- High speed I/O, 2S/1P/1G
- 1.44MB FDD
- 15" KFC SVGA monitor, green, NI, digital
- Trident PCI SVGA controller w/2MB RAM
- Chicony 101 enhanced KB, Hi-Res mouse

IBM 486DLC-75 Blue Lightning VLB

- Chipset and motherboard made by IBM
- Energy saving green system
- Math Co-Proc, 256K cache
- 8MB DRAM, upgradable to 64MB
- Mini-tower case w/230W power supply
- 420MB IDE HDD w/64K buffer
- Goldstar VESA LB IDE controller w/2S/1P/1G
- 1.44MB FDD
- 14" KFC SVGA monitor, green, NI
- Trident VESA LB SVGA controller w/1MB RAM
- Chicony 101 enhanced KB, Hi-Res mouse

Intel 486DX VLB

- VESA LB motherboard w/256K write back cache
- Energy saving green system
- 4MB DRAM, upgradable to 64MB
- Mini-tower case w/230W power supply
- 420MB IDE HDD w64K buffer
- Goldstar VESA LB SVGA IDE controller w/2S/1P/1G
- 1.44MB FDD
- 14" KFC SVGA monitor, green, NI
- Trident VESA LB SVGA controller w/1MB RAM
- Chicony 101 enhanced KB, Hi-Res mouse

IBM 486SLC-66

- PATH 411 Chipset motherboard made by IBM
- Energy saving green system
- Math Co-Proc, 128K cache
- 4MB DRAM, upgradable to 16MB
- Mini-tower case w/230W power supply
- 210MB IDE HDD w/32k buffer
- Goldstar VESA LB IDE controller w/2S/1P/1G
- 1.44MB FDD
- 14" KFC SVGA monitor, green, Interlaced
- Trident VESA LB SVGA controller w/1MB RAM
- Chicony 101 enhanced KB, Hi-Res mouse

Pentium-60 $1595.00
Pentium-90 $1795.00

$1050.00

i486DX2-66 $990.00
i486DX-33 $940.00

$860.00

WE WILL CONFIGURE SYSTEMS TO FIT YOUR NEEDS!

Multimedia Packages

Panasonic 2X CD ROM, Mozart 16Bit sound card, 2 amplified speakers, Compton's Encyclopedia, US Atlas, World Atlas, Chessmaster 4000, Mavis Beacon, 50 games for Window **$199.00**

Creative Labs Discovery CD16, 2X CD ROM, Soundblaster 16, 2 amplified speakers, 15 titles worth over $500.00!! **$249.00**

3X CD ROM packages ..... Call
4X CD ROM packages ..... Call

Fax Modems

Smart Link 96/24 S/R **$30.00**
GVC 14.4/14.4 S/R w/Voice mail **$70.00**

We also carry

- NOVELL Netware.
- NOVELL Certified Network products by Katron.
- Motherboards by Goldstar & IBM.
- Hard drives & Floppy drives.
- Memory modules.
- Keyboards by Chicony & Focus.
- KFC Green Monitors

please call for pricing!!

intel inside

KFC

PATH

energy

Syntax

909 598 9811

VISA

Fax: 909 598 9812
249 South Paseo Tesoro, Walnut CA 91789

Warranty: One year parts • lifetime labor • 3 years technical

REALIZABLE FANTASIES • BY JIM WARREN

NewtNet And The Revolution Of '96

Okay, now that the elections are over, we better get to work. (You didn't really think that all we citizens needed to do was vote, did you? You don't really want to leave our governance and future up to those in Washington—without citizen guidance and oversight—do you?)

The Future Is Like The Past, Only Different

What if...

•It's not *1*994; it's *18*94 And some o' them young whipper-snappers are runnin' 'round town in them thar new-fangled gas-buggy thingies. They're dangerous, hard to steer; they break down, scare the horses, and they're much too complicated for the little lady of the house to use. They'll never last.

Nonetheless, within just a decade or two—along with all the other automobile-wrought irrevocable societal changes—it became essentially impossible to conduct effective political action without using this new technology.

But some folks can't afford it, and others can't learn how to use it.

•In the late '40s, television spread across the land—for better and worse.

By 1960, Jack Kennedy used it—plus some Richard Daly ballot stuffings in Chicago—to squeak by Richard Nixon in the presidential race. Kennedy and his advisors used that era's new image-transportation system for political gain—as did a second-rate horse actor, twenty years later, and as did a "Texan with a bad haircut" who helped depose an incumbent president in 1992.

Within less than two decades, a new technology irrevocably changed how effective political action is conducted. (And it's now almost impossible for a homely or ugly person to get elected. Lincoln would lose. Ahh, but I digress.)

But TV's *really* expensive.

•Around the '70s, Richard Vigurie put together a then-sophisticated computerized system for identifying, tracking, and hustling potential small contributors to conservative causes. Using it, he generated massive cash-flow into conservatives' political campaigns—especially given federal matching funds for small contributions—and made personal millions from campaign-consultant fees in the process.

Again, new technology irrevocably changed the political landscape.

As it was in the past, so shall it be in the future—almost. *Except* for the cost!

This time, the new political technology is *cheaper, faster,* and *easier* than those preceding political tools. For the first time in centuries, effective political action is again economically available to anyone. Just like *any* effective political action, it takes time and effort—but it otherwise costs almost nothing at all!

Although the mass media didn't publicize it until after the elections, Gingrich has been urging for some time that coyly cloistered Congress open itself to Net-aided citizen oversight.

I'm talkin' about Net-based, computer-aided grassroots political action. In 1996, there will be federal and state elections that are won or lost depending on how well or poorly their candidates learn to use it.

Irresistible Political Tools

The first prerequisite for effective political action—by experienced political hacks, big-bucks lobbyists, or grassroots activists—is timely access to information on which to base informed actions.

The second prerequisite is the ability to communicate with the body politic—previously available only to those who could afford newsprint by the ton and broadcast airtime for the wealthy.

Politicians don't suck up to big-bucks special interests because they want the bucks; they grovel before the big bankrolls because they need 'em to fund their ability to communicate (propagandize) to their electorate!

Our interconnected thinkertoys are now poised to change all that. With fifteen to thirty million mostly upscale citizens already connected, and national connectivity growing at 4% to 8% per *month*,

(a) the Net provides access to decision data,

(b) the access is timely—which is crucial,

(c) the Net already reaches about 10% of

Fantasies *continued*

the population,

(d) it provides a *potent* tool for *coordinating* local, *offline* grassroots action to reach the full electorate, and

(e) most importantly—its access and empowerment make it economically available to almost anyone (and it's far easier, cheaper, and faster to learn to "drive" the information roadways than it is to learn to drive the vehicular roadways).

NewtNet And An Informed Electorate

Concerning the first prerequisite—timely access to essential information:

Most of my progressive friends (previously called "liberals") are horrified at the specter of the Republicans in general—and House Speaker Newt Gingrich (*georgia6@hr.house.gov*) in particular—taking control of Congress.

I feel differently.

I'm willing to give 'em six months—or even most of this nonelection year—to recognizably begin to improve on what the Democrats have done in the past two generations. (If you didn't like Reagan's monumental deficit or his taxbreaksfortherich, remember: The president could only spend money and reduce taxes, *as authorized by the then-Democratic Congress.*)

Although the mass media didn't publicize it until after the elections, Gingrich has been urging for some time that coyly cloistered Congress open itself to Net-aided citizen oversight.

Already often called "NewtNet," Gingrich has committed to making House legislative information available via the computer nets as soon as it's available to legislators and their lobbyists. With luck, he will also drag along his elite, unreachable Senate elders, entrenched in their private baronies.

But Do They Know What They're Doing?

I am convinced—so far—that Gingrich is dedicated to opening up congressional information to timely Net-based access. In theory.

However, I wonder about some of the indications I have received—and failed to receive—from Gingrich's staff and the House Republican's automation team regarding their plans, if any, for implementing such public access. After all, it is being designed in Washington—always cause for public concern.

To NewtMan, et al.

So this column is actually for Gingrich—and for Senate Leader Bob Dole and the rest of our Congress-critters. If you generally agree with what follows—send copies to Newt and Dole, and Senators Dianne Feinstein and Barbara Boxer, and to your own representative, with a note saying, more or less, "Do this, *NOW!*"

Note: This want-list and reader-action proposal is appearing, here in *MicroTimes*

NOW THEY TELL US!

On December 9, I faxed a request for information about Gingrich's proposed online access to House information to his press secretary, noting that I was preparing columns about this for several large-circulation periodicals. Response to date? Zip!

Not quite the timely access that Newt's proposed—although they were undoubtedly swamped.

January 4th was our deadline for this column; I transmitted it that afternoon.

It was also the opening day of Congress, when they passed history-making reforms in the rules that govern how the House does business. (Would that the Senate could do the same.) One rule they passed that night may directly affect Net-surfers, depending on how it is implemented:

They mandated that, for the first time, the *Congressional Record* would have to *accurately* report House members' *actual* comments; they revoked Congress-critters' traditional freedom to "revise" the official record.

They retained their right to "extend" their remarks—justified to allow inclusion of additional information that can't be presented in time-limited spoken comments. And they required that such "extensions" be in a "distinctive typeface," to clearly differentiate members' actual comments from their unspoken, after-the-fact extensions.

But those poor ol' print-oriented House leaders forgot that in "modern" online communications, monofont ASCII is the only "font" that is most-universally available (okay, so ASCII is *semi*-modern).

Call, fax, or write the House Administration Committee, and urge them to adopt implementing rules that will make those after-the-fact extensions clearly distinct from actual spoken comments in the *online* copies of the *Congressional Record.*

And a day later, the Librarian of Congress, James Billington, announced that congressional information was now globally available via their new system named THOMAS—as in Thomas Jefferson. It will include at least some, but almost certainly not all, of what this column has recommended—including the *Congressional Record.* Details in future columns.

Things do seem to be moving a bit faster in Congress than under the previous leadership.

—Jim Warren

WHOLESALE TO THE PUBLIC

FREE SOFTWARE w/COMPLETE SYSTEM PURCHASE:

CLIENT MANAGER • DAILY SCHEDULE • THINGS TO DO • FINANCIAL MANAGER • EASY ACCOUNTING (A/R, A/P, G/L...) !

[illegible] SYSTEM

- Mini-Tower Case
- 1MB RAM
- 280MB Hard Disk (500MB w/Double Space)
- IDE/I/O Controller
- 1.44MB Floppy Drive
- VGA Graphic Card
- 14" VGA Monitor
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty
- 72-Hour Burn-In Test

386DX-40MHz $529
(Upgradable to VESA 486SX/DX)
486DLC-40MHz $559
Intel 486SX2-50MHz $609
486DX2-50MHz $618
486DX2-66MHz $659

SPECIAL
TO BEAT ALL SPECIALS!
486DX2-50MHz VESA LOCAL BUS $810

VESA LOCAL BUS SYSTEM

- Mini-Tower Case
- 256K Cache Memory
- 4MB RAM
- 280MB Hard Disk (500MB w/Double Space)
- VESA IDE/I/O Controller
- 1.44MB Floppy Drive
- 1MB VESA SVGA Card
- 14" SVGA Non-Interlaced Monitor .28mm
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Warranty Parts
- 72 Hour Burn-In Test

486DX2-66MHz $870
IBM 486SLC2-66MHz $790
IBM 486DLC-75MHz $860
486DX4-100MHz $1125
Pentium 60 MHz $1195
Pentium 66 MHz $1220
Pentium PCI 90 MHz $1425

386SX-40MHz	Intel 486SX2 50MHz	486DX2-50MHz 256K	PENTIUM 90MHz
$175	$275	$285	$865

Systems Include: • Super Mini Tower Case • IMB RAM • 1.44MB Floppy Drive • Super IDE/I/O Controller (1:1) • 2 Serial/1 Parallel/1 Game Port • Real Time Clock and Calendar • 101 Enhanced Keyboard • Lifetime Labor Warranty • 1 Year Warranty Parts • 72-Hour Burn-In Test

386DX-40MHz 128K	486SLC2-66MHz IBM w/Math-Co	486DX2-66MHz 256K	PENTIUM 66MHz
$195	$255	$335	$675
486DLC-40MHz 128K	**486SLC-75MHz IBM w/Math-Co**	**486DX4-100MHz 256K**	**PENTIUM 60MHz**
$225	$335	$565	$655

FREE MOUSE W/COMPLETE SYSTEM PURCHASE!

INTEL 486DX2-66MHz DELUXE PACKAGE

- Intel 486DX2-66MHz w/256K Cache
- 8MB RAM
- 540MB Hard Disk (12ms)
- Vesa IDE/I/O Controller
- 1.44 Floppy Drive
- **ATi Mach 32 VLB Accelerator (1280x1024, 1MB Upgradable 2MB)**
- 15" N.I. Flat Screen SVGA Monitor
- Double Speed CD-ROM
- 16Bit Sound Card
- 12 CD Titles
- 40W Hi-Fi Stereo Speakers
- 101 Enhanced Keyboard
- 3-Button Mouse
- Lifetime Labor Warranty
- 1 Year Parts Warranty
- 72 Hour Burn-in Test

$1445

INTEL PENTIUM 90MHz DELUXE PACKAGE

- Intel Pentium 90MHz w/256K Cache
- 8MB RAM
- 540MB Hard Disk (12ms)
- PCI IDE Controller
- 1.44 Floppy Drive
- **ATi Mach 32 PCI 2MB Accelerator (1280x1024, 16MB True Color)**
- 15" N.I. Flat Screen SVGA Monitor
- Quad Speed CD-ROM
- 16Bit Sound Card
- 12 CD Titles
- 40W Hi-Fi Stereo Speakers
- 101 Enhanced Keyboard
- 3-Button Mouse
- Lifetime Labor Warranty
- 1 Year Parts Warranty
- 72 Hour Burn-in Test

$2145

Monitor Graphic Cards

14" Mono Monitor	$75
14" Mono VGA w/Card	$123
14" Color (.39)	$189
SVGA 14" (.28) Non-Interlaced	$199
SVGA 15" (.28) Non-Interlaced	$293
SVGA 17" Non-Interlaced (1280x1024)	$550
Mach 32 PCI (2MB)	$152
Mach 32 VLB (1MB)	$99

Modem Parts

Mouse	$7
Joy Stick	$15
2400 Modem	$23
(Sony, Mitsumi, Panasonic) CD ROM Double Speed	$112
FAX MODEM (9600 BAUD)	$29
250 Tape Drive	$139
250 Tape	$10
14400 FAX/DATA MODEM	$54
28800 FAX/DATA MODEM	$139
486DX-33/66MHzVLB Board	$79
Pentium 60/66MHz PCI Board	$180
Screen Filter	$24

CD Titles

12 CD Titles (Encyclopedia, Chess Master, Animals...)	$35
Family Pack (World Atlas, Animals, Oceans Below,Kids Can Read...)	$45
Shareware CD Titles (Window Games, Clip Art, Fonts, Business Titles...)	$7
Adult CD Titles	$12

Upgrades

Memory Upgrade Prices	CALL
1.2M FDD	$37
1.44M FDD	$32
486DX2-66MHz Upgrade (w/486-33MHz Trade-In)	$119

Hard Disk Drives

280MB IDE	$149
420MB IDE	$169
540 MB IDE	$199
720 MB IDE	$259
850 MB IDE	$319
1.0 GIG IDE	$419
1.7 GIG IDE	$499
1.08 GIG SCSI 2	$469
2.0 GIG SCSI 2	CALL

MULTIMEDIA SPECIALS

Creative Lab Discovery 16

Panasonic CD ROM
Sound Blaster 16
15 Titles
Speakers
$245

Double Speed Package

2x Speed CD ROM
True 16 bit Sound Card
12 CD Titles
Speakers
$199

Triple Speed Package

3x Speed NEC CD ROM
Sound Blaster 16 SCSI
12 CD Titles
40 Watt Hi-Fi Speakers
$395

Quad Speed Package

4x Speed CD ROM
Sound Blaster 16
12 CD Titles
40 Watt Stereo Speakers
$335

NETWORK SPECIALIST!

Novell Certified NetWare Engineer

FREE CONSULTING!!

Network Cards

Ethernet 16 Bit Card	$28
10 Base T 16	$29
Ethernet Combo	$33

Network Software

Netware 3.12	CALL
Netware 4.01	CALL
Windows for Workgroup	CALL
Windows NT	CALL

OTHER

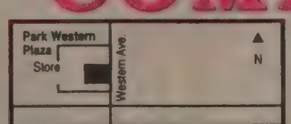
8 Port 10BT Hub	$155
12 Port 10BT Hub	$299

CALL FOR NOTEBOOKS!

BUY TODAY, DON'T PAY UNTIL TOMORROW! 90 DAYS SAME AS CASH! FINANCING AVAILABLE!

COMPUTOPIA

901 N. Western Ave.
Suite 2
Los Angeles, CA 90029
(213) 467-4646
Fax (213) 467-4600



Business Hours:
Mon.-Fri.
9:30 am-6:30 pm
Sat.
10 am - 6 pm

12093 S. Brookhurst St.
Suite D
Garden Grove, CA 92640
(714) 530-2200
Fax (714) 530-5500

Not responsible for typographical errors. Prices subject to change without notice. Prices based on cash discount. Payment Terms Available.

Fantasies *continued*

(200,000+ distribution), and in *Boardwatch* (90,000 copies), and in *Government Technology* (70,000).

Just think of the impact if 360,000 or so readers send these five so-easy-to-do messages to Congress—and perhaps also to the editorial-page editor of their local newspapers!

We Want ALL The Details!

NewtNet should include *timely*, free*, global access to all of the following, as soon as they are available to Congress-creatures and their lobbyists:

- Full text of all bills and amendments (with page and line numbers used in legislative references);
- All nonpartisan and partisan bill analyses;
- Congressional committee reports;
- Schedules and agendas for committees and all other announced meetings and hearings;
- Prepared testimony and handouts (require paid lobbyists to submit them on diskette);
- Bill history (actions that have been taken);
- Bill status (actions remaining for passage);
- All unclassified minutes and transcripts;
- Complete records of all motions made and votes taken (including those outrageous "voice votes" that permit House members to avoid being on the record *re* crucial decisions, e.g. last October's half-billion-dollar appropriation for the National Wiretap System *sans* independent oversight);
- The *Congressional Record* (even though it is wildly fictitious since legislators often "revise and extend" their actual remarks before publication as the official record);
- Transcripts of all House and Senate C-Span programs (which are *accurate, even though they cover only a very limited portion of* hearings and events);
- Position statements by legislators (except those issued within, say, six months before any federal primary or general election);
- Abstracts, summaries, topic indices, and cross-references for all legislative information;
- All reports by the Congressional Research Service (CRS);
- All Library of Congress computerized files;
- All federal statutes, regulations, policies, and treaties (even though agency regulations and policies are often executive-branch information rather than legislative-branch records);
- Proposed budgets plus actual, detailed expenditures, including those of Congress (include the what-if "game" software developed by the bipartisan deficit-reduction study commission, even though they couldn't agree on substantive rec-

continued on page 230

In 1996, there will be federal and state elections that are won or lost depending on how well or poorly their candidates learn to use the Net.

Coming Soon!
The Biggest Computer Show Of The Year
Is Coming To The Los Angeles Convention Center
Coming Soon!
Computer & Electronics
EXPO '95
Over 500 Vendor & Manufacturer Exhibit Booths!
Free Raffles!
Free Multimedia, Internet, Home Office Seminars Every Hour On The Hour
Network Professional Association "Hands On Internet Connectivity Demo's"
Children's Computer Stage
Virtual Reality Stage
Win A Multimedia Computer Each Day!
Vendor Discounts
For Vendor Registration Or More Info Call
Spectator Discounts
Coming Soon!
(805) 491-2183
Coming Soon!

Citicom Computer

Pentium 90 Multimedia

Intel Pentium 90 CPU
Intel Plato PCI Board w/ 256K
Medium Tower Case
16MB RAM
540MB Hard Disk Drive
1.44 Floppy Disk Drive
15" .28 NI Digital Monitor
PCI 64-BIT Video w/ 2MB
PCI IDE Controller
2 serial and 1 Parallel Port
Sound Blaster 16 Audio Card
Double Speed CD-ROM
Stereo Speakers
Mouse and Keyboard
Microsoft Works & Money CD
Microsoft Encarta 1995 CD
Microsoft Golf CD
Microsoft Instruments CD

2525

486DX2-66 Multimedia

Intel 486DX2-66 CPU
486DX2 Vesa w/ 256K
Medium Tower Case
8MB RAM
420MB Hard Disk Drive
1.44 Floppy Disk Drive
14" .28 NI SVGA Monitor
VESA SVGA Video w/ 1MB
Vesa IDE Controller
2 serial and 1 Parallel Port
Sound Blaster 16 Audio Card
Double Speed CD-ROM
Stereo Speakers
Mouse and Keyboard
Microsoft Works & Money CD
Microsoft Encarta 1995 CD
Microsoft Golf CD
Microsoft Musical Instruments

1495

Pentium 90 Windows Station

Intel Pentium 90 CPU
Intel Plato PCI Board w/ 256K
Medium Tower Case
8MB RAM
420MB Hard Disk Drive
1.44 Floppy Disk Drive
14" .28 NI SVGA Monitor
PCI 64-BIT Video w/ 2MB
PCI IDE Controller
2 serial and 1 Parallel Port
Serial Mouse
101 Enhanced Keyboard

1875

486DX2-66 Starter System

Intel 486DX2-66 CPU
486DX2 VESA w/ 256K
Mini Tower Case
4MB RAM
420MB Hard Disk Drive
1.44 Floppy Disk Drive
14" .28 NI SVGA Monitor
VESA SVGA Video w/ 1MB
VESA IDE Controller
2 serial and 1 Parallel Port
Serial Mouse
101 Enhanced Keyboard

995

5 Years Labor Warranty

on all Citicom Complete Systems

Multimedia Kits

16 Bit Sound Card 2X CD-ROM	$ 189
Sound Blaster 16 Panasonic 2X CD-ROM	$ 239
Sound Blaster 16 TEAC 4X CD-ROM	$ 349
Sound Blaster 16 SCSI Toshiba 4X SCSI CD	$ 449

Monitors

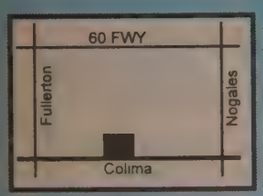
14" SVGA .28 NI	$ 195
Shamrock 1452 14" .28	215
Shamrock 1502 15" .28	315
Shamrock 1702 17" .26	595
Optiquest 2000DC .27	375
Optiquest 4000TC .25	795
Optiquest 4500DC .28	715
MAG DX-15F .26	385
MAG DX-17F .26	615
Sony 15SF .25	439
Sony 17SF .25	975

Memory

Samsung 420MB	$ 185
Samsung 560MB	235
Maxtor 420MB AV	195
Maxtor 540MB AV	245
Conner 420MB	195
Conner 540MB	245
Western Digital 420MB	205
Western Digital 540MB	255
Western Digital 840MB	355
Western Digital 1.08 Gig	485

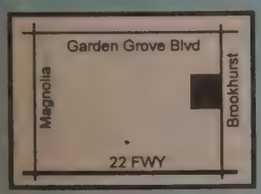
Graphic Cards

Trident ISA 1MB SVGA	$ 55
Trident 9400 VLB 1MB	65
S3-32 Bit 2MB DRAM	105
S3-64 Bit 2MB DRAM	145
Mach64 2MB DRAM	210
Mach64 2MB VRAM	285
Mach64 4MB VRAM	485
Stealth64 2MB VRAM	285
Stealth64 2MB DRAM	195
Viper SE 2MB VRAM	295
Impression+ 2MB VRAM	385



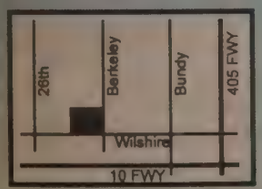
City of Industry

18759 Colima Road
Tel: (818) 913-6555
Fax: (818) 913-5270



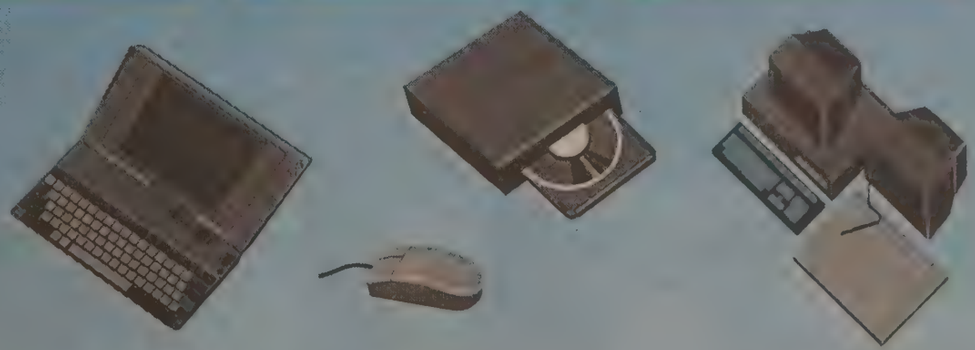
Garden Grove

13161 Brookhurst St.
Tel: (714) 537-3399
Fax: (714) 537-2521



West Los Angeles

3019 Wilshire Blvd.
Tel: (310) 453-2726
Fax: (310) 453-6716



The highest quality at the best prices.

WE CONFIGURE

ATC Pentium 90MHz

Intel Pentium 90MHz CPU
8MB RAM Upgradable to 128MB,
256K Cache
Fast 540MB IDE Hard Drive
Teac 1.44 Floppy Drive
PCI 64 Bit Windows Acc. 1MB Video Card
14" Super VGA .28 NI Monitor (1024x768)
2 - Serial, 1 - Parallel Ports
101 Enhanced Keyboard
Mid-Tower Case

Reg. $1795 Cash $1695

All systems include a mouse!

IBM 486-75MHz CoBalt

Recommended for Windows Application from ATC Computer

PC Computing rates IBM as slightly faster than Intel 486dx2-66
Lightning fast in Microsoft WINDOWS application
IBM 486CoBalt 75MHz CPU
IBM's 3 Year Warranty on M.B.
4MB RAM Upgradable to 64MB
420MB IDE Hard Drive w/256K Cache
Teac 1.2MB & 1.44MB Floppy
14" SVGA .28NI Monitor (1024x768)
VESA Windows Acc. 1MB Video Card SVGA 16M Color
101 Enhanced Keyboard
Mini Tower Case

Reg. $1095 Cash $995

This Month's SPECIAL

Intel 486DX2-66 CPU (No AMD or Cyrix)
486, Pentium Ready Mother Board w/256K Cache
4MB RAM
Fast 540MB IDE Hard Drive
Teac 1.44 Floppy Drive
14" Super VGA Monitor (1024x768)
Trident Super VGA Card (1024x768)
2 - Serial, 1 - Parallel Ports
101 Enhanced Keyboard
Mini-Tower Case

Reg. $995 Cash $895

100MHz 486 V-LB

Intel 486dx4-100 CPU w/16k int. cache
Vesa Local Bus Motherboard
4MB RAM Upgradable to 128MB
w/256K Ext. Cache
420MB IDE Hard Drive
Teac 1.2MB & 1.44MB Floppy Drive
14" SVGA Non-Int. .28 Monitor (1024x768)
VLB Windows Acc. Video Card w/1MB
VLB IDE I/O Card
101 Enh. Keyboard
Mini-Tower Case

Reg. $1495 Cash $1395

Happy Customer List

Department of Water & Power
L.A. Police Department
U.C.L.A.
U.S.C.
Xerox
Improv
Toshiba
KCBS
KTLA
Metro
Hard Rock Cafe
RAMPAGE
Improv Driving School
Samy's Camera

YOUR WAY

CELEBRATES 10 YEARS IN BUSINESS

CALL FOR THE BEST PRICE, BEST DEAL, BEST SERVICE

ATC Multi Media

8MB RAM, 256K Cache (128K on SLC)
Fast 540MB IDE Hard Drive
Teac 1.44MB 3.5" Floppy Drive
14" Super VGA Monitor NI (1024x768)
Trident Super VGA Card (1024x768)
2 - Serial, 1 - Parallel Ports
101 Enhanced Keyboard
Mini-Tower Case
16 Bit Sound Blaster
Compatible Sound Card
14 CD-Title Software
Pair of speakers

SPEED	486SLC-33	486SLC2-50	486SX-33	486DX2-66
	REG/CASH	REG/CASH	REG/CASH	REG/CASH
DOUBLE	$995/**$895**	$1045/**$945**	$1095/**$995**	$1195/**$1095**
TRIPLE	$1095/**$995**	$1145/**$1045**	$1195/**$1095**	$1295/**$1195**

ATC IBM-100

IBM CoBalt LPX Blue Lightning Mother Board
BIOS System Setup program that automatically detects hardware placed on the board
16K Internal Cache
Integrated local bus Cirrus 5428 w/1MB
Supports up to 4 IDE Hard Drive
Intel P24 Zif Socket
Supports up to 2.8MB Floppy Drive

2 - 16550 Fast Serial Ports w/16-byte FIFO's
1 - Parallel Ports with BiDirectional (ECP, EPP)
8MB RAM, 256K Cache
540MB Fast IDE Hard Drive
Teac 1.44, 3.5" Floppy Drive
15" SVGA .28 NI Monitor 1280x1024
101 Enhanced Keyboard
Logitec OEM Mouse

Reg. $1595 Cash $1495

Upgrades for 486DX or SX System Only

WE CONFIGURE YOUR WAY

Per 4MB Upgrade	$145	DTC IDE I/O w/fast serial/ 4 hard disk cont.	$25
Trident 1MB VESA	$30	15" SVGA Mon. Non-Inter. Flat 1280x1024	$100
Trident 64 bit 1MB VESA	$50	17" SVGA Mon. Non-Inter. Flat 1280x1024	$365
ATI Mach 64 2MB (VESA)	$165	540MB to 1 Gig	$225
ATI Mach 64 2MB VRAM	$265	14.4 Internal Fax Modem	$59
ATI Mach 64 4MB VRAM	$470	14.4 US Robotic Sportster Internal	$115
VESA IDE I/O Upgrade	$10	28.8 Internal Fax/Modem	$175
		28.8 US Robotic Int. Fax./Modem	$205
		28.8 US Robotic Ext. Fax/Modem	$245

CALL FOR OTHER UPGRADES

Sound Blaster Discovery CD 16

Sound Blaster 16
Panasonic 2x speed CD-ROM Drive
Pair of Boosted Speakers
15 Title Software
Microphone
Unlimited Tech. support, 7 days a week

Reg. $295 Cash $275

Life Time Labor Warranty
1 Year Parts Warranty

Free access to BBS (310) 869-1337

ECONO SYSTEM

System Includes

4MB RAM, 256K Cache (128K on SLC)
Fast 540MB IDE Hard Dirve
Teac 1.44MB Floppy Drive
14" Super VGA Monitor (1024x768)
Trident Super VGA Card (1024x768)
2 - Serial, 1 - Parallel Ports
101 Enhanced Keyboard
Mini-Tower Case

	Reg.	Cash
Intel486SX-33 VESA	$895	**$795**
486SLC-33 ISA	$795	**$745**
486SLC2 -50 ISA	$845	**$795**

ATC COMPUTER

5 LOCATIONS TO SERVE YOU!

ORANGE	HOLLYWOOD	LOS ANGELES	TORRANCE	VAN NUYS
1132 E. Katella Ave. Ste A-16	6301 Sunset Blvd. #106	7150 Beverly Blvd.	15800 Hawthorne Blvd. #D	6411 Sepulveda Blvd. #1J
(714)744-5156	(213) 962-8610	(213) 938-6622	(310)370-2655	(818)988-9806

ADVANCED COMPUTER CENTERS

PLEASE CALL FOR CURRENT PRICING!

Pentium Notebook
w/16 Bit Sound Card Built-In

- Intel Pentium CPU 60/66MHz
- 16KB Internal Cache
- 8MB RAM Exp. to 40MB
- 1X 16550 Serial & 1X ECP/EPP Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot
- 9.5" Active TFT Color
- 10.3" Dual Scan Color
- 25mm Trackball
- NiMH Rechargeable Battery

NP3600

Pentium-60, 8MB/250MB HDD
Dual-Scan Color LCD $2415
Active TFT Color LCD $3120

Pentium Notebook
w/16 Bit Sound Card Built-In

- Intel Pentium CPU 90 MHz
- 16KB Internal & 256KB Secondary Cache
- 8MB RAM Exp. to 40MB
- 1X 16550 Serial & 1X ECP/EPP Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot
- 9.5" or 10.4" Active TFT Color
- 10.3" Dual Scan Color
- 19mm Trackball
- NiMH Rechargeable Battery

NP7500/NP7600

250MB/4MB	Mono	Dual Scan Color	Active Color
486DX2-66	$1445	$1920	$2630
250MB/8MB	**Mono**	**Dual Scan Color**	**Active Color**
Pentium/90MHz	N/A	$2790	$3535

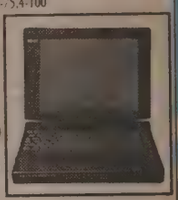
NP9200
w/ Sound Card Built-In

- Intel SL Enhanced 486DX-33, 2-66, 4-75, 4-100
- 8KB Internal & 256KB Secondary Cache
- 4MB RAM Exp. to 36MB
- 1X Serial & 1X Printer Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA 1MB w/ Windows Accelerator
- 2X PCMCIA Slot
- 9.5" Active TFT Color
- 10.3" Dual Scan Color
- 25mm Trackball
- NiMH Rechargeable Battery

250MB/4MB	Mono	Dual Scan Color	Active Color
486SX-33	$1410	$1870	$2575
486DX-33	1440	1900	2605
486DX2-66	1475	1935	2640
486DX4-100	1675	2135	2840

NP9400
w/16 Bit Sound Card Built-In and 2X CD ROM Built-in

- Intel SL Enhanced 486DX-33,2-66,4-75,4-100
- 8KB Internal & 256KB (up to 1MB) Secondary Cache
- 4MB RAM Exp. to 64MB
- 2X 16550 Serial & 1X ECP/EPP Printer Port
- Game Port
- Removable HDD (250,340,520,810)
- 32 Bit Local Bus VGA (1MB w/ Windows Accelerator) & IDE HDD
- 2X PCMCIA Slot (Option 2nd PCMCIA Slot X2)
- 9.5" & 10.4" Active TFT Color
- 10.3" Dual Scan Color
- Trackpoint Built-in
- NiMH Rechargeable Battery



250MB/4MB	10.3" DUAL	9.5" ACTIVE	10.4" ACTIVE
486SX-33	$2160	$2865	$3115
486DX2-66	2225	2930	3180
486DX4-75	2400	3105	3355
486DX4-100	2425	3130	3380

17" SPECIAL $625

Features:

- 17" Non-glare, Flat Square Screen
- On-screen controls for adjusting brightness, contrast, image position and size
- Low Radiation, .27, NI, 1280 x 1024 resolution
- EPA VESA Compliant

15" AcerView 56L $330
14" AcerView 34T .28 . . $220
14" AcerView 11DG .39 . . $190

AOpen
Acer Open Division
Your Key Component Partner

CONFIGURATIONS

	M/B	M/B+CPU	BASIC SYSTEM (210MB,4MB, SVGA 14")
P5-90/256 PCI + ISA (INTEL MB)	$290	$921	$1604
P5-90/256 PCI + ISA (OPTI CHIPSET)	$225	$821	$1553
P5-66/256 PCI + ISA (INTEL CHIPSET)	$275	$887	$1453
P5-66/256 PCI + ISA (SIS CHIPSET)	$205	$617	$1334
P5-60/256 PCI + ISA (INTEL CHIPSET)	$275	$670	$1410
P5-60/256 PCI + ISA (SIS CHIPSET)	$205	$600	$1316
INTEL 486-DX2/66 VLB/256K	$95	$265	$945
INTEL 486-DX/50 VLB/256K	$95	$358	$1039
INTEL 486-DX2/50 VLB/256K	$95	$261	$938
INTEL 486-DX/33 VLB/256K	$95	$224	$899
INTEL 486-DX4/100 VLB/256K	$118	$495	$1173
AMD 486-DX2/66 VLB/256K	$95	$253	$934
AMD 486-DX40 VLB/256K	$95	$234	$909

Basic Systems Include: M/B, CPU, 4MB, 1.44MB FDD, IDE I/O, 210MB HDD, Mini Tower, 1MB SVGA, KB, Mouse, 14" Monitor

UPGRADES FOR BASIC SYSTEMS

420MB HDD	ADD	$40
540MB HDD	ADD	$70
1.08GB HDD	ADD	$285
ACER 15" SVGA	ADD	$110
ACER 17" SVGA	ADD	$405
1.2MB FDD	ADD	$45
1.44MB FDD	ADD	$35
8MB RAM	ADD	$140
512K CACHE	ADD	$45
2MB VGA CARD	ADD	$50
16MB RAM (486)	ADD	$295
16MB RAM (P5)	ADD	$420
FOCUS 2001 KB	ADD	$18
FOCUS 8000 KB	ADD	$24
FOCUS 9000 KB	ADD	$34
KEYTRONICS KB	ADD	$15
MICROSOFT MOUSE	ADD	$20
MINI TOWER (FCC)	ADD	$15
MED TOWER	ADD	$15
FULL TOWER	ADD	$25
DESKTOP	ADD	$0
W/O 1.44 FDD	DEDUCT	$28
W/O HDD	DEDUCT	130
W/O MONITOR	DEDUCT	185
W/O RAM	DEDUCT	130
W/O KEYBOARD	DEDUCT	10
W/O MOUSE & PAD	DEDUCT	8
W/O VGA CARD (486)	DEDUCT	60
W/O VGA CARD (P5)	DEDUCT	76

MULTIMEDIA UPGRADE KITS

Double Speed CD ROM Kit	$239
Panasonic Double Speed CD ROM Sound Blaster 16 Sound Card	
Triple Speed CD ROM Kit	$379
Toshiba SCSI Triple Speed CD ROM Sound Blaster 16 SCSI Sound Card	
Quad 4X Speed CD ROM Kit	$349
Mitsumi Quad Speed CD ROM Sound Blaster 16 Sound Card	
Quad 4X Speed CD ROM Kit	$449
Toshiba SCSI Quad Speed CD ROM Sound Blaster 16 SCSI Sound Card	

HARD DISK DRIVES

210MB 14MS (IDE) CONNER	$145
420MB 14MS (IDE) CONNER	185
540MB 12MS (IDE) CONNER	215
850MB 12MS (IDE) CONNER	299
1.0GB 12MS (IDE) WESTERN DIGITAL	430
540MB 12MS (SCSI) CONNER	255
1.0GB 10.5MS (SCSI) CONNER	515
2.1GB 9.5MS (SCSI-2) QUANTUM	955

HDD/FDD ADAPTERS

IDE I/O (ISA)	$13
IDE I/O (VLB)	18
IDE I/O (PCI)	35
ISA Enhanced I/O (2S, 1P) 16550 UART	24
ISA IDE I/O (2S, 1P) 16550 UART	29
Adapter 1542CF	169
Adapter 2842VI w/Kit	255
Adapter 2940PCI	225
ASUS SCSI (PCI)	82
Promise DC-4030 (VLB, 0K)	103

CASES

Mini Tower 200W Dig	$45
Mini Tower (FCC) 200W	60
Desktop 200W Dig	45
Med Tower 250W Dig	60
Full Tower 250W Dig	70

VIDEO CARDS

VGA 256K (ISA)	$28
VGA 512K (ISA)	39
VGA 1MB (ISA)	58
Trident 1MB ((VLB)	65
Cirrus Logic 1MB (VLB)	69
S3-805 1MB (VLB)	72
S3-804 1MB (PCI)	92
ATI Wonder 1MB DRAM (VLB/PCI)	110
ATI Mach 32 2MB VRAM (VLB/PCI)	239
ATI WinTurbo Mach 64 2MB VRAM (VLB/PCI)	285
Diamond Stealth 24 1MB (VLB)	139
Diamond Stealth 24 2MB VRAM (VLB/PCI)	285
Diamond Viper 2MB VRAM (VLB/PCI)	259
Mono/LPT Port	15
Western Digital Bahama 64 1MB PCI	125
Western Digital Bali 1MB PCI	92

MONITORS

Acer 11DG 14" .39 NI 1024	$190
Acer 34D 14" .28 NI 1024	209
Acer 34T 14" .28 NI 1024	220
Acer 56L 15" .28 NI 1024 Dig	330
Acer 76i 17" .27 NI 1280 Dig on Screen	625
ADI 3GP 14" .28 NI 1024	295
ADI 4GP 15" .28 NI 1280	375
ADI 5EP 17" .28 NI 1280	675
MAG DX 15F 15" .28 NI 1280	349
NEC 5XF 17" .28 NI 1280	1046
NCX 5XP 17" .28 NI 1660Hz 1280 Mac & PC	1229
Sony 15SF 15" NI 1280	459
Viewsonic 15E .28 NI 1024	369
Viewsonic 15EX .26 NI 1024 Dig	389
Viewsonic 15G .26 NI 1024 On-screen	379
Viewsonic 15 .27 NI 1280	429
Viewsonic 17E .28 NI 1280 Dig	735
Viewsonic 17G .28 NI 1280 On-screen	795
Viewsonic 17 .27 NI 1600 Dig	929
14" Monochrome	79
14" Monochrome VGA	89

CD ROM/MULTIMEDIA

Sound Blaster 16	$73
Sound Blaster 16 MCD	79
Sound Blaster 16 SCSI	105
Panasonic 2X CD ROM	118
NEC 3Xi SCSI CDROM	235
NEC 3Xe SCSI CD ROM Ext.	425
Mitsumi FX400 Quad CD ROM	210
Toshiba Triple SCSI CD ROM	219
Toshiba 4X SCSI CD ROM	275
3-IN-1 AT CD ROM Contl Card	15
CP OK Portable Speaker	8
SP-691 25W Speaker w/AC Adapter	24
MLI-115 115W Speaker w/AC Adapter	40
CD Caddy	7
CD Titles	Start From $10

KEYBOARDS

Acer 101 Key (Small)	$15
Acer 101 Key (Regular)	30
Keytronic 101 Key	30
Focus 2001 w/Dust Cover	34
Focus 8000 w/Calculator	39
Focus 9000 Programmable w/Calculator	49
101 Keyboard PS/2	15
Q-Tronics 101 Keyboard	18

MISCELLANEOUS

Smartlink Fax/Modem 96/24	$30
Smartlink Fax/Modem 14.4/14.4 Int.	68
Smartlink Fax/Modem 14.4/14.4 Ext.	99
Smartlink Fax/Modem/Voice 14.4/14.4	79
Smartlink Fax/Modem 28.8/28.8 Int.	179
US Robotic Fax/Modem 14.4/14.4 Int.	105
US Robotic Fax/Modem 14.4/14.4 Ext.	130
US Robotic Fax/Modem 28.8/28.8 Int.	100
US Robotic Fax/Modem 28.8/28.8 Ext.	225
Microsoft Serial 2 Mouse	29
Microsoft Ball Point Mouse	20
Logitech First Mouse	35
Logitech Mouseman	45
Z-Nix Mouse	9
Mouse Pad	2
Conner Int. 250MB Tape Back-up	135
Conner Ext. 250MB Tape Back-up	279
Colorado Int 250MB Tape Back-up	145
Colorado Ext. 250MB Tape Back-up	319

Financing Available on Approved Credit. Government, School and Corporate P.O.'s Welcome.

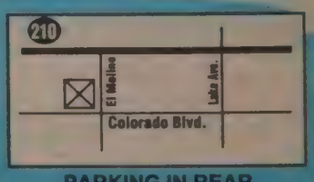
3% Cash Discount

CORPORATE OFFICE & SERVICE CENTER
Appointments Please

6800 Orangethorpe Ave. #A
Buena Park,CA 90620
TEL (714) 521-9783
FAX (714) 522-0990

Mon.-Fri. 10:00-6:30
Sat. 11:30-6:00
Closed Sunday

645 E. Colorado Blvd.
Pasadena, CA 91101
TEL (818) 795-3939
FAX (818) 795-0549



PARKING IN REAR

Prices subject to change without notice.

PENS & PALMTOPS • BY MITSU HADEISHI

The Usefulness Of Magic

Plus: Sharp's Zaurus

In my last column I spent some time describing Sony's new entry into the personal communicator market, the PIC-1000, better known as the MagicLink. For those of you who missed that column: The MagicLink is based on the General Magic MagicCap operating system, sells for $899, weighs 1.2lbs., and measures 7.5" x 5.2" x 1" (making it quite portable, but still too big for a pocket, and even larger than the Newton). It comes with 1 MB of RAM, a single PCMCIA Type II slot, a serial port, and a built-in 2400 baud data/9600 baud fax modem (although somewhat slow, a nice feature to have built-in).

I've had a chance to use the MagicLink more extensively since my last column, and I have a number of comments to make both about the unit as it is now and how I see it fitting into the PDA marketplace as time goes on.

Good Magic

What do I like about the MagicLink?

Well, as I mentioned last time, it doesn't do handwriting recognition, but instead uses an on-screen keyboard. Although not quite large enough for touch typing (not to mention the fact that the lack of tactile feedback makes it difficult to type accurately), it's still a lot easier to enter information than with the Apple Newton.

The user interface, while initially perhaps somewhat off-putting in its cutesiness, is nevertheless both easy to get around and fast enough to satisfy many power users; in addition to the indirect but friendly ways of getting at information, there are a number of features provided to allow quick navigation around the MagicCap virtual world.

For example, to get back to the home desk, you need only tap on the desk icon that is always present at the bottom of the screen. Similarly, the operating system provides a lot of thoughtful features to make data retrieval and entry quick and easy, such as providing "guesses" as to what you're trying to type based on the context (for example, if you're entering a name, after you've entered a few letters it tries to find the name in your address book and "suggests" the remaining characters for you; if it's guessed wrong you can just keep typing and the machine will retract its "guess").

The MagicLink comes with a number of versatile and powerful applications in addition to the basic MagicCap operating environment, such as the PenCell spreadsheet and Pocket Quicken. I was gratified that I didn't have to look at the manual in order to use the unit; it's rather self-explanatory. It comes with a pleasant tutorial which guides you around the basic features of the machine, as well as some more sophisticated customization options; this introduction is very well done, and even comes with an automatic sign-up procedure that gets you up and running with the email service built into the unit, AT&T PersonaLink Services.

The user interface, while initially perhaps somewhat off-putting in its cutesiness, is nevertheless both easy to get around and fast enough to satisfy many power users.

Magic, But Not Perfect

After playing with the MagicLink for a while, however, I have a number of caveats.

The display is barely readable; one has to use it in very good direct light, and even then the contrast is not all that good. This is perhaps one of the weakest aspects of the unit; although not fatal, it does make the machine a lot less pleasant to use. Hopefully Sony will be able to address this flaw in a future upgraded machine.

Interoperability with other operating systems, networks, and computers is still primitive; essentially, you're limited at present to sending and receiving text email. Also, while you can send email to another PersonaLink subscriber by simply typing in their full user name, if you're corresponding with people on the Internet or elsewhere, your address looks like a huge long digital number, impossible to remember, and even worse than CompuServe email addresses. This is a design flaw in the AT&T service, and although it's not the fault of Sony or General Magic per se, it indicates a curious lack of attention to ease of use for those who want to exchange information with people outside the isolated world of Telescript and MagicCap.

I don't see this sort of attitude as boding very well for the future of AT&T's mail system; it's the same sort of proprietary attitude which has destroyed or severely limited the expansion of many other would-be technology standards. It seems they want their email system to be easy to use, but almost purposefully, it seems, they make the technology opaque when it comes to interacting with the rest of the universe, perhaps in an ill-conceived

attempt to encourage people to remain entirely within their own little world. We've seen this sort of strategy fail time and again in the past, but perhaps AT&T is too big and bureaucratic to realize the folly of this sort of approach.

However, all the blame for difficulty of interoperability cannot be laid solely at AT&T's doorstep; General Magic also shares a little here. The MagicCap technology is designed to work with Telescript-based networks and servers—a noble idea in theory, but something which might have worked better as value added on top of support for existing standards for serving up information, such as the World Wide Web or even simply gopher and ftp.

It would be nice, for example, if you could use the MagicLink to interface with the Internet directly, or if MagicCap mail supported, say, the MIME standard for binary attachments, which would have allowed MagicCap and Internet-based mail programs to exchange binary information in a natural fashion. Unfortunately, however, MagicCap does not support these standards but creates an entirely incompatible one of its own which, although technically impressive, still has a tiny installed base exacerbated by narrow interconnectivity with existing technology and networks.

Although MagicLink and Zaurus are comparable in price, they come from different design heritages.

This violates a basic market-driven design principle which has been proven time and again: Give the user everything and then some, don't ask them to choose one technology over another. Users want their cake and they want to eat it too, and companies that ignore this do so at their own peril.

Magic Vs. Wizard

Nevertheless, I like MagicLink and the technology that supports it. The idea of intelligent agents, built into the Telescript design, is one which can allow inexpensive, low-bandwidth data connections to be used in a way which would still allow a great deal of power. This requires, however, a proliferation of Telescript-based services, and the barrier to entry in that case is the difficulty of creating Telescript itself. It remains to be seen how quickly or easily these services will come into being. This highlights even more the need for interoperability with existing standards which already have a significant infrastructure built up.

And though I like this machine, I'm not sure how broad its market penetration will be. There are significant barriers to overcome. Although the interface for this machine is indeed quite usable, most of

Get up to Pentium™ Speed... Fast :

PCI / VESA LOCAL BUS SYSTEM

MULTI MEDIA SYSTEM
SOUND BLASTER

486DX2-66

* SONY 2X IDE CD-ROM DRIVE.
* SOUND BLASTER 16-BITS SOUND CARD.
* 2 SPEAKERS.
* 15 CD TITLES.

$1290

FREE DOS 6.20 WINDOWS 3.11
With Manuals. System purchase only

We are not the lowest price leader, but we offer the highest quality and performance with BEST VALUED COMPONENTS.

PENTIUM™

- 4 PCI - 2 VLB Slots.
- Pentium 586 DX Microprocessor.
- Built-in Math Co-Processor.
- Mid-size tower case, 230w PS
- 256K Cache of Hi-Speed RAM.
- 8MB RAM (Exp. to 128MB).
- 1.2MB & 1.44MB TEAC FDD.
- 540MB IDE 11ms HD.
- 2-serials, 1-parallel & 1-game ports.
- 101-key enhanced keyboard.
- PCI ATI- Mach64 Graphics Card 16.7 mil. color- 1280 x 1024. - 1MB.
- 15" .28 dot N.I monitor.

GREEN PC

✧ 486 DX4-100 $1635
✧ P586-90 $1995

✧ 486DX2-66 $1095

- 3 VESA Local Bus Slots.
- Intel Pentium Overdrive ready.
- 486 Microprocessor.
- Built-in Math Co-Processor.
- Mini tower case, 230w PS
- 256K Cache of Hi-Speed RAM.
- 4MB RAM (Exp. to 32MB).
- 1.2MB & 1.44MB TEAC FDD.
- 420MB IDE 13ms HD.
- 2-serials, 1-parallel & 1-game ports.
- 101-key enhanced keyboard.
- VESA Local Bus Acc. Graphics Card 16.7 mil. color- 32 BIT 1280 x 1024-1MB.
- 14" .28 dot N.I monitor

WARRANTY: 1 YEAR PARTS & 2 YEARS LABOR

GREEN PC

SERVICE CONTRACT For Business System
Please call for more information
$15 monthly

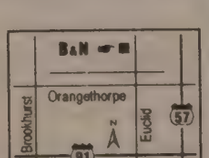
Industrial Rackmount available Please Call.

All prices and specifications are subject to change without notice.

We accept VISA MasterCard

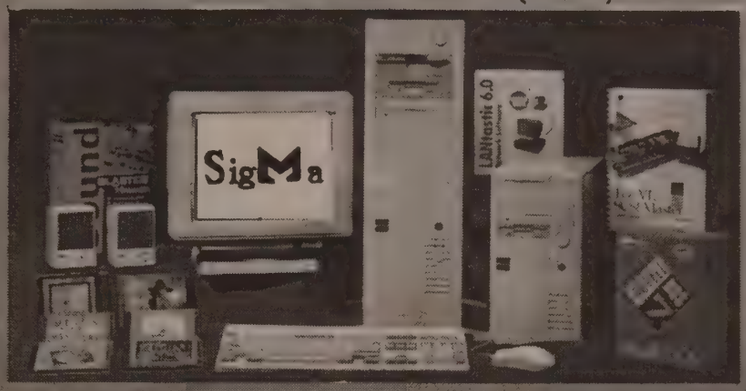
Financing Available

B&N COMPUTER
707 South Euclid
Fullerton, CA 92632
Tel: (714) 871-5038
Fax: (714) 871-6413

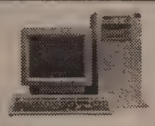


LTD COMPUTER
13372 Goldenwest St., #106
Westminster, CA 92683
Tel: (714) 894-4274
Fax: (714) 894-9074

1 HOUR FREE TRAINING
(w/System Purchase!!!)



90 MHZ PENTIUM PCI



* Intel Pentium 90 CPU
* AIR Motherboard
* 8 MB High Speed Ram
* Dimaond stealth 64 PCI w/2MB
* 540 MB Hard drive
* Mini tower or Desktop
* 14" Monitor /.28/NI
* 1.44 TEAC Floppy drive
* Enhance 101 Keyboard/ Mouse

$2082

60/66 MHZ PENTIUM PCI

* Intel Pentium CPU
* Amptron Motherboard
* 8 MB High Speed Ram
* Dimaond stealth 64 PCI w/2MB
* 540 MB Hard drive
* Mini tower or Desktop
* 14" Monitor /.28/NI
* 1.44 TEAC Floppy drive
* Enhance 101 Keyboard/ Mouse

60 MHZ **$1667**
66 MHZ **$1777**

486DX2/66 MULTIMEDIA

* 486DX2/66 Intel CPU
* Amptron 486/Zif/256/ Motherboard
* 8MB High Speed Memory
* 540 MB Hard drive
* VLB Video Card/1MB
* VLB Controller Card
* Midtower Case w/LED display
* 1.44 TEAC Floppy Drive
* 2x Multi-Session CD-ROM
* SoundBlaster 16 MCD
* 14" Monitor / .28 / NI
* Enhanced 101 Keyboard/Mouse

$1396

COMPLETE NOVELL CLASSES FOR ONLY....$750
Day, Evening, Weekends

Network your Business..... ONLY $4500

1 File Server & 2 Work Station

Includes basic Wiring, Installation and setup

File Server

* DX2/66 Intel CPU
* Amptron Motherboard
* 8 MB High Speed Ram
* MGP Card
* 540 MB Hard drive
* MidTower Case
* 14" Monitor / Black & White
* 1.44 TEAC Floppy drive
* Enhance 101 Keyboard
* Novel 3.12 (5 User)

Software Packages

* Dental Office
* Dental Laboratory
* Gas Station
* Body Shop Estimate
* Retail Store, Cash Register, Bar Code

Work Station

* 486SX/33 MHZ
* Amptron Motherboard
* 4 MB High Speed Ram
* SVGA Video Card
* 210 MB Hard drive
* DeskTop Case
* 14" Monitor SVGA /NI/.28
* 1.44 TEAC Floppy drive
* Enhance 101 Keyboard/Mouse

Any Business Packages ONLY Call Us ...

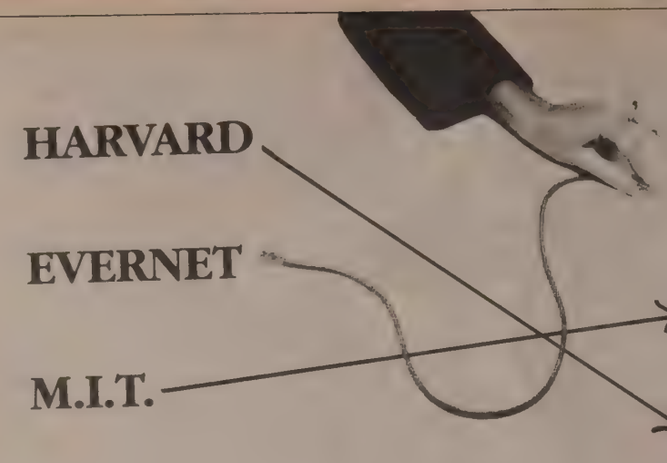
*14" Monitor/NI /.28....$220
*540MB , 3.5 IDE Hard drive...$250
*SVGA 16 Bit /1MB....$48
*VLB Cirrus Logic /1MB.....$68

*VLB Trident /1MB....$75
*1.44 TEAC Floppy Drive...$35
*VLB IDE Controller Card...$21
*101 Keyboard.....$15

*Panasonic Double Speed *SoundBlaster /NCD *4 Title CD **$198**

*486 VLB Green Motherboard *256k Cache/ 30 Pin/72Pin *3 VLB Slots CPU Not Included **$92**

SigMa BUSINESS SYSTEMS
TEL: 818-717-0240
8363 RESEDA BLV., #12
NORTHRIDGE, CA 91324



MAKE THE OBVIOUS CONNECTION

If you are looking for the best way to learn all about the Novell Certified NetWare® Engineer Program, make it simple on yourself - call the leader - Evernet Education Services. Evernet Education is the most highly respected LAN training company with the finest instructors and best equipped classrooms. Novell Authorized Education Centers teach you the skills necessary to get the maximum performance from NetWare®. That's why you should choose the leader in operating systems training, Evernet Education Services. Call Evernet today for all the details on the great new things that are coming up this year.

We're so sure that you will get the finest training anywhere, we offer this guarantee on all of our courses. If an Evernet student fails to pass any of the certification testing, we welcome them back to review the appropriate course at no additional cost.

GUARANTEED EVERNET SATISFACTION

- FREE 2-user Version of NetWare Available
- FREE CNE Orientations
- Financing Available to Qualified Candidates

CALL TODAY 1-800-447-3658

Novell Authorized Education Center

EVERNET
EDUCATION SERVICES
Los Angeles • San Francisco • Sacramento

interact!
A CD-ROM STORE

We Buy & Sell Used CD-ROM Software

Hundreds and Hundreds of New & Used CD-ROM Titles in Stock for IBM and Mac

We Carry a Wide Variety of Adult CD-ROMs

The Interact! promise: We absolutely guarantee that you will find the largest selection of CD ROM titles anywhere in Los Angeles!

We are located in Old Town Pasadena 2 Blocks North of Colorado at Fair Oaks
2 East Holly Street

818-578-7282
OPEN 7 DAYS A WEEK
MON-SAT 10am - 7pm • SUN 11am - 6pm

The Zaurus is clearly a souped-up descendant of the Wizard line.

the basic functions it provides can be had for a much lower cost in the form of a Casio SF-R20, a Sharp Wizard, or a Psion 3a organizer. Although the learning curve for these machines is more steep than for the MagicCap unit, it's hard to say whether this alone will be enough to prod customers to spend the extra money on the new Sony.

And even though the MagicLink is quick enough to be useful, I find, in fact, my pocket organizer actually a bit faster in terms of data entry and retrieval for simple things like entering a quick note or retrieving an address. To get the phone number of a friend of mine, for example, requires merely hitting the address book key, typing the first few letters of her name, then hitting "Search." The same operation on the MagicLink is similar, but does require a few more "keystrokes" (or pen taps) and takes just a little longer.

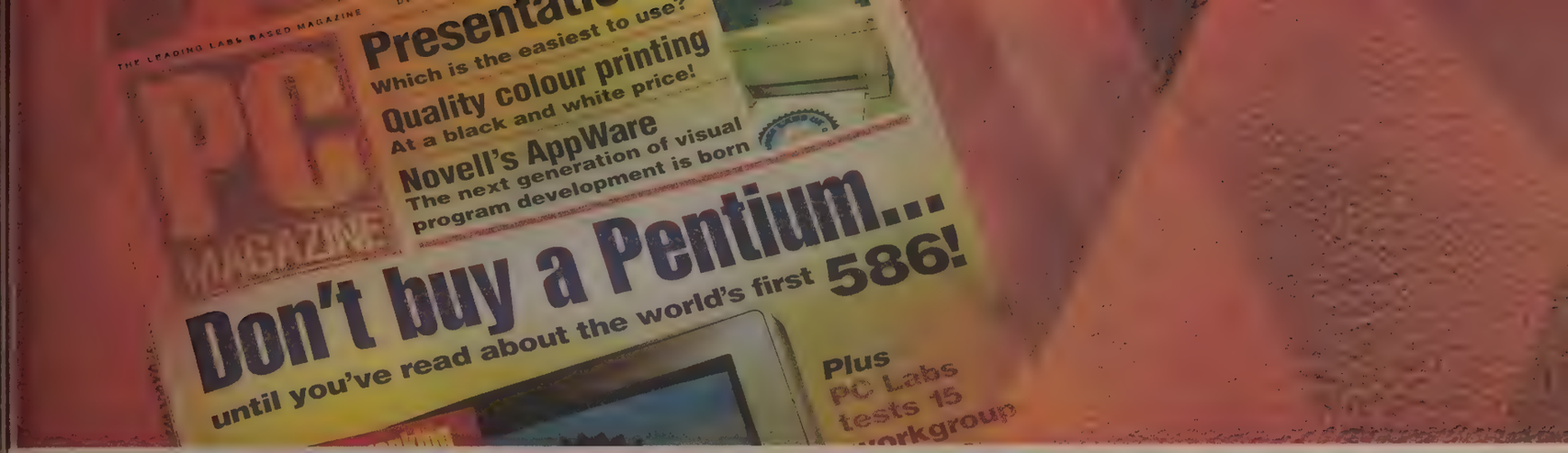
Organizers have other advantages as well: the batteries last much longer, they are smaller and lighter and can fit into a pocket much more easily, and they usually have keyboards, which are still faster to type on than the on-screen variety used in the MagicLink (though as I've said before it is nevertheless an improvement over unreliable handwriting recognition).

A number of the flaws mentioned above can be addressed by third-party applications and advances in hardware technology, which will lower the cost of the unit and improve things like display contrast. The technology looks very promising, and it's just a matter of time before the PDA industry finally takes off: the issue is not whether, but when, and we'll just have to wait and see how successful the MagicLink design will turn out to be.

Sharp Zaurus Emerges

A new and rather intriguing PDA has been

continued on page 43



PC Magazine (UK), December 1994. Reprinted with kind permission of Ziff-Davis UK Limited

Demand NexGen's Nx586™ Processor. Superior Performance. Unbeatable Price.

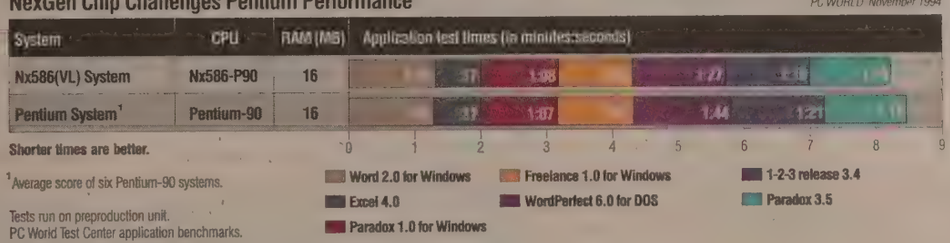
Now, you don't have to settle for a Pentium™ processor-based PC. Because there's a tough new kid on the block that delivers superior power and performance... for a *lot* less money.

It's the NexGen Nx586 processor. Manufactured by IBM Microelectronics.™* With patented RISC86™ microarchitecture that outperforms the Pentium processor, megahertz for megahertz. It's fully compatible with your DOS and Windows™ applications. And it's absolutely available right now.

So just call one of the PC suppliers listed below and ask for it by name. The Nx586 processor by NexGen. Don't buy a PC without it.

NexGen Chip Challenges Pentium Performance

PC WORLD November 1994



Shorter times are better.

†Average score of six Pentium-90 systems.

Tests run on preproduction unit.
PC World Test Center application benchmarks.

Absolutely Available Right Now. Don't Buy a PC Without It!

Nx586 processor-based PCs are available from the following PC suppliers. Call the PC supplier of your choice and ask for NexGen's Nx586 processor by name.

A2 Industries
La Jolla, CA
619-452-5540

Aberdeen
Montebello, CA
800-552-6868

Add Tech Computer Inc.
Somerset, NJ
908-805-0900

AddNet Computer
Tucson, AZ
602-294-7200

Adisys Corporation
Santa Clara, CA
800-423-4797

Alaris
Fremont, CA
800-317-2348

Allied Manufacturing Group
Lodi, NJ
201-778-0707

Alpine Computer Center
Rockford, IL
815-229-0200

ASA Computers, Inc.
Santa Clara, CA
408-496-6953

Bailllo's Inc.
Albuquerque, NM
505-883-7511

Blackship Computer
San Jose, CA
800-531-7447

C Point
Huntington Beach, CA
800-683-3323

City Computers
Rockville, MD
301-762-6880

Compu-Tek
Richardson, TX
800-994-0221

Computer Components
Middleton, WI
608-831-1165

Computer Discount Mart
Greenwood, IN
317-889-7220

Computer Parts Plus
San Marcos, CA
619-741-1700

Computer Resources
Englewood, CO
800-662-0034

Computer Zone
Beaverton, OR
503-626-3511

Data Storage Marketing
Boulder, CO
800-543-6098

Diamond Technologies, Inc.
Anaheim, CA
800-989-7253

Drake Systems
Tempe, AZ
800-244-7800

Duracom Computer
Irving, TX
800-551-9000

Eckliktik PC's
Phoenix, AZ
602-265-4353

Fry's
Palo Alto, CA
415-496-6100

FYI Computer Source
Cincinnati, OH
513-753-1831

Gateway USA, Inc.
Westminster, CO
303-438-5500

Globe Computers
Scottsdale, AZ
800-467-0013

ICS Computer Systems Corp.
Richardson, TX
800-852-0614

Lucky Computers
Richardson, TX
214-437-3251

Luiski International
Melville, NY
516-454-8220

M.E.C.
Norcross, GA
404-447-1726

Mandl Corporation
Scottsdale, AZ
602-922-1435

Maximus
Monrovia, CA
800-394-6299

Megabyte International
Norcross, GA
404-729-8630

Micro Simplex
Mesa, AZ
800-477-6144

National Micro Computers
Salt Lake City, UT
800-424-2983

NCA Computer Products
Sunnyvale, CA
800-961-1200

Net Computers International
Dallas, TX
214-386-9310

Nexel Systems
Princeton, NJ
609-371-0003

Nictrix Corporation
Leoma, NJ
201-947-2220

Omni-Tech
Houston, TX
713-784-9191

Orientec Corp of America
El Monte, CA
818-442-1818

PC Concepts
Dallas, TX
214-328-2888

PC Express, Inc.
Richfield, MN
800-937-1100

PC Performance Centers
Englewood, CO
303-771-8030

Regnis, Inc.
Tampa, FL
813-623-3302

Robotech, Inc.
Midvale, UT
801-565-0645

S.I.L Radio Shack
Truth or Consequences, NM
505-894-3442

Saturn Computers
Reno, NV
702-825-8588

Systems Design Computers
San Diego, CA
619-537-3737

TAP
New Brunswick, NJ
908-247-6000

Tangent Computers
Burlingame, CA
800-800-5550

The Missing Byte Computers
Houston, TX
713-782-5557

Top Data
Sunnyvale, CA
800-888-5318

US Micro Express, Inc.
Bellevue, WA
800-874-5505

US Microtech
Milpitas, CA
408-433-5522

Vectoria Computers
Quebec, Canada
1-800-VEC-3433

Vortex Computer Labs
Scottsdale, AZ
800-486-4586

West Hills LAN Systems
Chatsworth, CA
800-367-5267

© 1995 NexGen, Inc. Nx586, RISC86, and NexGen are trademarks of NexGen, Inc. Pentium is a trademark of Intel Corporation. Intel is a registered trademark of Intel Corporation. "IBM Microelectronics"™ is a registered trademark of the International Business Machines Corporation. All products mentioned herein are trademarks of their respective companies. If you'd like to find out about reselling NexGen products, please call 1-800-8NEXGEN.

NexGen™

Computer Max SYSTEMS

FREE COMPUTER COVER

386SX/40MHz BAREBONES

- 1MB RAM
- 230W Power Supply
- 1.44MB Floppy Drive
- 2 Serial/1Parallel/1 Game Port
- Mini Tower Case
- Digital Display
- Hard & Floppy Controller
- 101 Keyboard

$169

486DLC/40MHz

- 1MB RAM
- Digital Display
- 8 Expansion Slots
- Math Coprocessor
- Mini Tower Case
- 230W Power Supply
- 1.44MB Floppy Drive
- Hard & Floppy Controller
- 2 Serial/1Parallel/1 Game Port
- 101 Keyboard
- 128K Cache Expandable to 256K Cache

$239

386DX/40MHz BAREBONES

- 1MB RAM
- Mini Tower Case
- Digital Display
- Hard & Floppy Controller
- 101 Keyboard
- 2 Serial/1Parallel/1 Game Port
- 128K Cache
- 230W Power Supply
- 1.44MB Floppy Drive

$209

386DX/40MHz

- AMD CPU, 128K Cache
- 1.44 3.5" Floppy Disk Drive
- FDD & IDE Controller
- 170MB IDE Hard Drive
- 14" .28dp SVGA Monitor
- 2MB RAM
- Mini Tower Case, 230 U/L & Digital Display
- 512K SVGA Video Card
- 2 Serial/1 Parallel/1 Game Port
- 101 Enhanced Keyboard
- DOS 6.22

$579

486SLC/33MHz Multimedia System

- 2MB RAM
- 1.44 Floppy Disk Drive
- Mini Tower Case w/Digital Display
- 230W UL Power Supply
- 101 Enhanced Mechanical K/B
- SVGA Video Card
- IDE/FDD Controller
- 2 Serial/1Parallel/1 Game
- 170MB IDE Drive
- Sony Double Speed CD-ROM
- 16bit Stereo Sound Card
- Windows 3.11 & DOS 6.22
- 3-Button Hi-Resolution Mouse
- Microphone + Speakers Included
- 14" SVGA Monitor 1024x768 (Full Screen)

$779

486 BASIC VLB SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 4MB RAM
- 250MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- 1MB High Color Window Accelerator
- 14" SVGA .28dp N.I. Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/Digital Display
- 230W UL Power Supply

INTEL 486DX/33MHz VLB

- Intel CPU, 256K Cache
- 1.44 3.5" Floppy Disk Drive
- 2 Serial/1 Parallel/1 Game Port
- Hi-Resolution Mouse
- 32 bit VLB Windows Accelerator up to 2MB
- 14" .28dp SVGA Monitor Full Screen
- Mini Tower Case, 230 U/L & Digital Display
- P24 Zif Socket, Upgradable to 100MHz
- 250MB IDE Hard Drive
- 32bit VLB IDE Controller
- 101 Enhanced Keyboard
- DOS 6.22 & Windows 3.11

$839

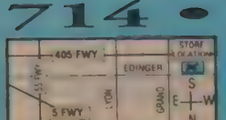
486 BUSINESS SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 4MB RAM
- 420MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- VLB 1MB Window Accelerator
- 14" Full Screen Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/Digital Display
- 230W UL Power Supply

486 MULTIMEDIA SYSTEM

- 486 Local Bus Motherboard
- 1.44 Floppy Disk Drive
- 8MB RAM
- 540MB IDE Drive
- VLB IDE/FDD Controller
- 2 Serial/1 Parallel/1 Game Port
- 1MB High Color Window Accelerator
- 15" SVGA .28dp N.I. Monitor
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Medium Tower Case w/Digital Display
- 230W UL Power Supply
- 16bit Stereo Sound Card
- 2x CD ROM Drive
- Shielded Speaker System
- Microphone + 12 CD Titles

714 • 953 • 0233



Santa Ana Location
1322 E. EDINGER, SANTA ANA, CA 92705
We are located directly behind Guadalajara Restaurant
We are not visible from the street.
STORE HOURS: M-F 9AM-5PM

2 LOCATIONS

PRICES SUBJECT TO CHANGE W/OUT NOTICE, NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS

714 • 452 • 0065

23552 Commerce Center Drive, Suite Q
Laguna Hills, CA 92653
STORE HOURS: M-F 9:30AM-5:30PM

PHOEBE

96/24 Internal Voice Mail Fax Modem $39
14.4 Internal/External Fax Modem Winfax Lite, Cables 55/85
14.4 Internal Voice Mail Fax Modem 89
28.8 Internal/External Fax Modem V.34 ..... 139/159

US ROBOTICS

14.4 Int./Ext. Fax Modem $99/119
28.8 V.34 Int/Ext 225/249

SUPRA

14.4 Int. Fax Modem Express Plus Int./Ext. $89/109
14.4 Int./Ext. Fax Modem LC 115/129
14.4 Fax Modem MAC 139
28.8 Int./Ext. Fax Modem V.34 ..... 199/259

ZOOM

14.4 Int/Ext. Fax Modem $99/129
14.4 Internal Fax Modem w/Voice Mail 139
28.8 Int/Ext. Fax Modem 149/179

SOUND CARDS

ZOLTRIX AUDIO PLUS 1600 - 8bit Stereo Sound Card, Includes: Interface Card + Speakers $49
ZOLTRIX AUDIO PLUS - 16bit Sound Card, Includes: Interface Card 69
SBC 16 MCD - 16bit Sound Card, Multi-Interface, 12 CD Titles 89
PRO AUDIO BASIC - 16bit Sound Card 69

VOICE MAIL

14.4 Internal Fax Modem Multiple Mailboxes, Customized Greetings, Forward to Pager, Remote Retrieval and More!

$89!

24 INTERNAL CARDINAL MODEM W/1 MONTH FREE PRODIGY OFFER!! ONLY $19

INSTALLATION +$10

FREE SOFTWARE W/ ANY PURCHASE!!

MULTIMEDIA KITS

MEDIA DEPOT MULTIMEDIA

2x CD ROM Acer
Amplified Speakers
Microphone
Acer 16bit Sound Card

$229

14 CD TITLES:
Grolier's Encyclopedia 95, Chessmaster, Mavis Beacon, U.S. Atlas, World Atlas, Robocop 3D, F-29 Retaliator, Pushover, Epic, Might & Magic III, D/Generation, Contraption Zack, The Chessmaster 2100 & Life & Death II

MICROSOFT HOME MULTIMEDIA

2x CD ROM Sanyo
Amplified Speakers
Microphone
16bit Sound Card

$269

6 CD TITLES:
Encarta 94, Dangerous Animals, Microsoft Money, Works, Arcades, Entertainment Pak

CD TITLES

All You Can Play, Business Library, Art History, Computer Supermarket, Travel to Space, Family Fun, World of Education, 49ers Window Games, Sound Library II, 1,400 Programs, Windows Programs, Windows 50 Games, Image Library II, 3D Animania, Games Galore, 3500 Designer Clip Art, Business Library, 101 Multimedia, Clip Art Library, United Computers, Communication Master, Music Box, Midi & Wave Classical Workshop, Photo CD, Dr. Fun Pak, 5 Star Games, Christmas Postcard Includes CD, I Lon Library, Rainbow Children Park Animation Tour $8

Mother Goose, Monkey Island, Animal Alphabet, Aladdin, Arthur's Teacher, Animals, Bibles & Religion, Bible Study and Games, Bible (Children's Guide), Beauty and the Beast, Blue Force, Capitol Hill, Challenge Pak , Day of the Tentacle, Family Doctor, F-15 Strike Eagle, F-117A Stealth Bomber, Grolier's Encyclopedia, Just Grandma & Me, Guidebook to Mathematics, Iron Helix, Indiana Jones, Languages of the World, Mayo Clinic, Jurassic Park, Return to the Zock, Carmen San Diego, Mad Dog McCree, Family Health Book, Dinosaurs Encyclopedia, Kings Quest V, Mad Dog, Monkey Island, Mega Race, Mavis Beacon, Multimedia World History, Monarch Notes, Mozart, Operation Desert Storm, Power Rangers, Presidents, Protostar, Quantum Gate, Quick in Spanish, Ringworld, Space Shuttle, Stun and Run, Talking Dictionary, Twain's World, U.S. Atlas, U.S. Air Power, U.S. Battle Tanks, U.S. History, The Presidents, U.S. Bombers, U.S. Aircraft Carriers, Sports Illustrated 1994, Dinosaurs Encyclopedia, World Atlas, Zork, 7th Quest $15

Shareware Medley, Image World II, Mario is Missing, Kids Read, U.S. Atlas, World Atlas, Ocean Below, Space Shuttle, Scary Poems of Rotten Kids, Farm Animals, Game Palace, Spiders, Butterflies, Whales, A Tree Through the Season, What Air Can Do, Birds & How They Grow, Dinosaurs, Doom, Doom II, Game Studio, Image Compendium,Tale of Benjamin Bunny, Scarey Poems, Aesop Fables, Heather Hits Home Run, Tale of Peter Rabbit, A Long Hard Day at the Ranch, Mud Puddle, Thomas Snowsuit, Cinderella, Oceans Below, Wolf 3-D $10

Mad Dog II, Microsoft Money, Microsoft Golf, Microsoft Musical, Star Wars $19

Star Trek, Time Table of History $20

Compton's Encyclopedia, Encarta '94, Slim City $25

Microsoft Encarta '95 ..... $35

MANY MORE CD's!

Compton's Encyclopedia 1994/1995 ..$19/25

Challenge Pak - Robo Cop 3D, F-29 Retaliator, Push Over, Epic, Might & Magic, D/Generation, Contraption Zack, The Chessmaster 2100, Life & Death II, The Brains $19

Eureka Pak - Compton's Interactive Encyclopedia, World Atlas, US Atlas, Chessmaster 3000, Mavis Beacon Teaches Typing, Etc $39

Legend Pak (15 Titles) - Cinderella, Thomas Snowsuit, RoboCop 3D, F-29 Retaliator, Pushover, Epic, Might & Magic III, D/Generation, Contraption Zack, The Chessmaster 2100, Life & Death II, The Paper Bag Princess, Mud Puddle, The Tale of Benjamin Bunny, Scary Poems $39

ADULT CD'S:-

Hot Line Taboo, Men's Club, Obsessions, Pretty Baby, Pink Lady, Motion & Picture, Cartoon Fantasy, Moving Fantasies, Insatiable Woman, Visual Fantasies, Pearl (Movie), Movies for the Night, Day Dream, Adult Movie Collection $8

A Pussy Called Wanda II, Adult Interactive Sampler 20, American Girls, Girls of Vivid, High Volume Nude, Super Model Go Wild, Erotic, Screen Dreams, Oral Sex, Sexual Encounters, Lesbian Lust, Beautiful Women, Steamy Sex $18

Oriental Hit Night, Sakura, La Traviata, Professional Beauties, World's Best Breasts, XXX Over 1,000 Pictures $15

MISCELLANEOUS

MONITORS

Glass Monitor Screen Filter $10
14" Monochrome Monitor 79
14" VGA Monitor .39 159
14" VGA Monitor .39 Full Screen 179
14" SVGA Monitor .28 179
14" SVGA Monitor .28 Full Screen 199
14" Monitor .28 N-I 199
14" SVGA Monitor .28 N-I Full Screen .209
15" SVGA Monitor .28 N-I Flat Screen .275
15" SVGA Monitor .28 N-I Digital Control 297

VIDEO DISPLAY CARDS

Monochrome Graphics Cars $12
256K SVGA HMO 24
512K SVGA Trident 35
1 Meg SVGA Trident 55
1 Meg VLB Trident 65
1 Meg VLB Cirrus Logic 69

MOTHERBOARDS

386SX-40MHz w/CPU $55
486SX-33MHz w/CPU 145
386DX-40MHz w/CPU 82
486DX2-66MHz VLB w/CPU 239
486DX2-80MHz VLB w/CPU 279
486DX-100MHz VLB w/CPU 339
486DLC w/CPU 119
Pentium 60/66MHz w/CPU 599/613
Pentium 90MHz w/CPU 829
Intel 90MHz w/CPU 929

CONTROLLER CARDS

IDE Controller 2S/2P/1G $12
I/O Card VESA Local Bus 20
I/O 16550 U-Art 25
I/O 16550 VESA Local Bus I/O 49
Printer CArd 12
Floppy IDE Controller 12

KEYBOARDS

101 Soft Touch $15
101 Click 19
Chicony Soft Touch 5311 19
Chicony Click 5181 29
Focus Click 2001 32

CASES

Mini Tower 200W P/S LED $35
Desktop 200W P/S LED 45
Medium Tower 230W P/S LED 55
Full Tower 250W P/S LED 69
200W Power Supply 25

FLOPPY

1.44/1.2 ..... $33/43
1.44 TEAC/1.2 TEAC 39/45

HARD DRIVES

170MB $125
250MB 139
420MB 179
540MB 215

MICE

Genius Mouse
Easy Mouse $9.00
Clixes Mouse 15
Mouse 3-Plus (FREE Software) 29
Hi-Point 39
New Track 39
3-Button Serial Mouse 5
Z-Nix 2 Button Mouse 8
Genius LC 2 Button Mouse 8
Mouse Pad 1.50
Microsoft Mouse 29
Trackball 19
Wrist Pad 2.99
1995 Calendar Mouse Pad 2.99

SHAREWARE SOFTWARE

OVER 1,000 To Choose From ..ONLY $1.99
Games, Educational, Pictures, X-rated

CD ROMS

Sony 55A $119
Panasonic 119
Mitsumi 119
TEAC 4x 225
Toshiba 4x 289

MISC. CD/DISK

CD Disk Box ..... $.99¢
CD Flip File 3.50
CD Organizer 12/36 ..... 5.99/8.99
3 1/2" Disk Box 10pc. 1.50
3 1/2" Disk Box 50pc. 4.99
3 1/2" Disk Box 100pc. 6.99
5 1/4" Disk Box 10pc. 1.50
5 1/4" Disk Box 50pc. 4.99
5 1/4" Disk Box 100pc. 6.99

SCANNERS

Genius Black & White/Gray Scale $79/109
Genius Color/Flatbed 239/579

AND MORE!!!

Computer Speaker System (Pair) ... $5
Amplified Speakers (Pair) 15
Amplified Speakers (Pair) 80 Watt/112Watt 49/59
Microphone 5
Joystick 10
Game Pad/Cordless 10/19
Scanner Tray 29
Printer Stand 2.99
Mouse Holder 1.99
Monitor Moving Arm 29
Power Center 15
Power Strip 3.99
Copy Holder 5.00
Mounting Frame 5.00
Computer Vacuum Cleaner 9.00
3 1/2" Disk 10Pc. 3.99
Computer Stand 2.99
Complete Computer Cover 9.00
14" Monitor Cover 3.99
Case Cover (Mini, Medium, Full Tower) 3.99
Keyboard Cover 3.99
Printer Cover 3.99
Winfax Lite Software 9.00
Keyboard Drawers Under/Top 15/19
Lan Card (Jumperless Network Card) 35
Conner 250 Tape Backup 149
TV to VGA Encoder 99
Hi-Tuner (Delivers TV Signals to Your PC) .89
Easy Painter 99
Hi-Video (Motion Picture Manipulation) MPEG Card (Movie) 225

3 YEARS ON-SITE SERVICE FREE

Grand Opening In Riverside

Celebrating Our 7th Year in Business!

MARS 486DX2/DX4 VL-bus Systems

FCC CLASS B CERTIFIED

- Intel 486DX2/66 or 486DX4/100MHZ CPU
- 4MB (72-pin) system RAM, max 128MB
- 256KB write-back cache RAM, max 512KB
- P24T upgradeable; full green function motherboard
- 420MB IDE mode-3 hard drive; 1.44MB floppy drive
- 32-bit VESA local bus IDE mode-3 hard/floppy drive controller
- 2 hi-speed serial, 1 ECP/EPP parallel, floppy controller
- 32-bit VESA local bus video card w/ accelerator & 1MB DRAM
- 14" Shamrock SVGA monitor (1024x768, .28dp, N/I)
- 101-key enhanced keyboard
- Mid-tower or desktop case, 230W UL power supply
- Sony 5SE double-speed internal CD-ROM drive
- MS-DOS 6.2X with disks & concise guide

486DX2/66 VL-bus $1289

486DX4/100 VL-bus $1549

MARS Pentium 90/100 MHz PCI Systems

FCC CLASS B CERTIFIED

- Intel Pentium 90/100MHz CPU & Intel Neptune chip set
- 8MB (72-pin) system RAM, max 512MB
- 256KB write-back cache RAM, max 512KB
- P54CT upgradeable; true 3.3v operation
- 540MB IDE mode-3 hard drive; 1.44MB floppy drive
- 32-bit PCI IDE mode-3 hard drive controller
- 2 hi-speed serial, 1 ECP/EPP parallel, floppy controller
- 32-bit PCI video card w/ 64-bit accelerator & 1MB DRAM (Diamond)
- 15" Shamrock SVGA N/I monitor (1280x1024, .28dp)
- 101-key enhanced keyboard
- Mid-tower case, 200W UL power supply (case not shown)
- Sony 5SE double-speed internal CD-ROM drive
- MS-DOS 6.2X with disks & concise guide

Pentium 90MHz/PCI $2339

Pentium 100MHz/PCI $2629

MARS • N • O • T • E •

NOTE NOTE NOTE NOTE

We custom configure systems to meet your needs. If you don't see it, please call for a quote.

We provide expert local area network (LAN) installation and service (Novell and LANtastic).

If you would rather fight than switch, we are available to do upgrades-- motherboard, CPU, RAM, hard drive, CD-ROM, tape drive, etc. Please call for a quote.

COMPONENTS:
We also have excellent prices on a full range of PC-compatible components. Please call for a quote.

SOFTWARE:
Sorry, we only carry operating systems and GUI's.

WARRANTY (ON COMPLETE SYSTEMS):
Parts one year; lifetime labor (for repair or replacement of defective hardware/software); and three (3) years of on site service within most of LA and Orange counties and the Riverside/ San Bernardino area (outlying areas may be covered with a surcharge). Please ask your sales person for details and specific service area coverage.

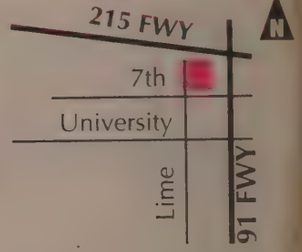
NO SURCHARGE FOR CREDIT CARDS:
We Accept

VISA MasterCard DISCOVER

DISCLAIMER
Prices,configurations,availability, and terms and conditions are subject to change without notice.

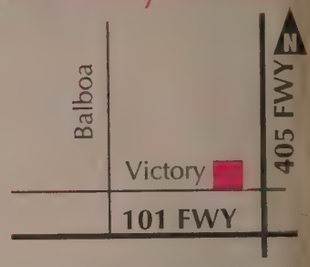
MARS COMPUTERS

Riverside Office



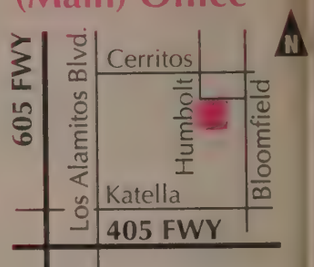
3600 Lime St, Suite 315
Riverside, CA 92501
Phone: (909) 274-9698
Fax: (909) 274-9725
Days/hours of operation:
M-F, 9:00-5:30

Van Nuys Office



16209 Victory Boulvard,
Van Nuys, CA 91406
Phone: (818) 785-7608
Fax: (818) 785-7634
Days/hours of operation:
M-F, 9:00-5:30

Los Alamitos (Main) Office



10655 Humbolt Street,
Los Alamitos, CA 90720
Phone: (310) 493-0719
Fax: (310) 493-0787
Days/hours of operation:
M-F, 7:30-6:30

*The Intel Inside logo is a registerted trademark of Intel Corporation

Ad code: MT020695

Palmtops *continued from page 38*

announced by Sharp, the makers of the popular Wizard line of organizers. Like their OZ-9000 series organizers, the Sharp Zaurus combines both pen and keyboard input.

Unlike the 9000 series, however, it has a totally new windowing, multitasking operating system called Synergy; a built-in word processing program with spell checker; a mail program; a drawing function (which allows drawings to be embedded in word processing documents); data hyper-linking capabilities; a high-speed infrared data communication port (which, interestingly, supports data transfer with a Newton); one meg of RAM; a true PCMCIA Type II slot, which can be used for both Flash RAM (up to 16MB) or SRAM (up to 2MB) expansion; and a faster internal processor.

Despite the large feature set, this machine still supports organizer-like battery life; Sharp reports battery life of up to two months, far longer than would be expected for a high-power-drain machine such as the Apple Newton. I'm a bit disappointed, however, that it does not include a spreadsheet; hopefully this can be made available later as an add-on. The Zaurus can run third-party applications downloaded into its memory.

The unit will retail at $749 for the base unit, or $849 including Sharp's CE-FM4 mini fax modem (the modem is also compatible with the OZ-9000 series Wizards), which attaches to the side of the unit and leaves the PCMCIA slot free. Some are guessing that the street price for the machine will be around $500 for the base unit and $600 including the fax modem.

It will be interesting to see how the MagicLink and the Zaurus end up faring in the marketplace. Although the two machines are comparable in price, they come from different design heritages; the MagicLink and MagicCap/Telescript were designed from scratch to be parts of a powerful, integrated, high-end PDA environment, and the Zaurus is clearly a souped-up descendant of the Wizard line of organizers (though given the apparent flexibility of the Zaurus operating system, it no longer classifies as an organizer, but as a full-blown PDA).

Unlike the MagicLink, the Zaurus is not part of a full-blown PDA services strategy; it's really a standalone unit which has some capabilities for communications (faxing, a terminal program, a mail protocol), but doesn't have anything like Telescript supporting it (on the other hand, the Newton doesn't have anything liké that, either). The Zaurus also seems to have many fewer bundled software applications like PenCell and Pocket Quicken which are included with the MagicLink.

Sharp indicates that they will be releasing a software development kit for the Zaurus sometime in mid-'95, and a number of vendors including Sharp have already announced add-on applications.

The Zaurus is expected to ship by the end of February. From the press release, it is clear that Sharp's expecting to market this to corporate users, although the machine might have general appeal to the same audience that purchased the OZ-9000 series organizers (which, when new, sold for a similar price). I will be writing more about this machine in future columns. ■

RESOURCES:

Sharp Zaurus PDA
Sharp Corporation
1-800-321-8877
Sony PIC-1000 Magic Link
Sony Corporation
1-800-342-5721

Copyright © 1995 by Mitsu Hadeishi. All rights reserved.

The Robert Austin
Computer Show & Sale

Over 100 Booths At Every Show

Browse through aisle after aisle of Computer Bargains

UPCOMING SHOWS

Anaheim Stadium
February 25, 1995
2000 State College Blvd,
Anaheim - Admission $4

Anaheim Stadium
March 18, 1995
2000 State College Blvd,
Anaheim - Admission $4

Super Savings on:

- Latest PC Systems
- Business Software
- Game/Family Software
- Multimedia Upgrades
- CD ROM Software
- Memory Upgrades
- Super VGA Monitors
- Accessories/Supplies
- Latest Shareware

Thousands of Products Avaiable for Immediate Purchase at Wholesale Prices

All shows open from 10am to 4pm
Kids 12 & under are always FREE!

LAPTOPS • ED KAHN

Help Tools For Working With Windows On Your Laptop

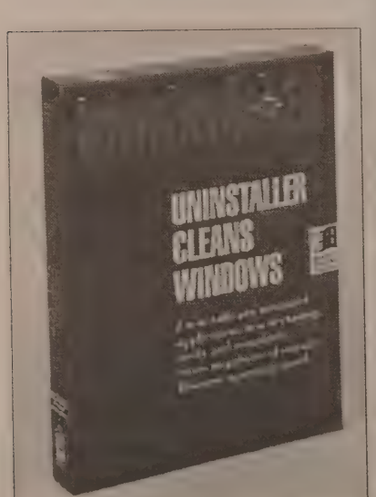
RESOURCES:

Uninstaller 2, $69.95
MicroHelp, Inc.
4359 Shallowford
Industrial Pkwy.
Marietta, GA 30066
1-800-922-3383

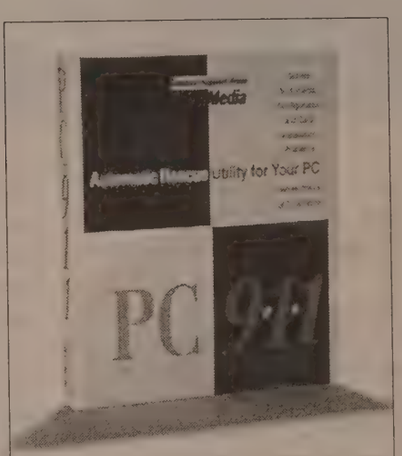
PC911, $49.95
CyberMedia
2029 Century Park E.,
Suite 810
Los Angeles, CA 90067
1-800-529-2373

Almost everyone has moved from DOS to Windows on their portable. While there are advantages to the Windows interface over standard MS-DOS, there are also drawbacks. It is these drawbacks and how to deal with them that I will be discussing this month. The main drawback to Windows is that it is a good deal more complex than plain old DOS. As long as everything works well, there is no problem, but as soon as you have trouble, you will realize that Windows is far more complex than any interface you have dealt with before.

If you are a user who installs your software applications and never fiddles with your machine again (glory to you!), Windows will probably never cause you much of a problem, but if you are the kind of user who installs the latest version of programs that you use or tries new programs in the hopes of finding the ultimate solution, you undoubtedly have noticed that removing a Windows-based program from your hard drive is a good deal more complex than the same job in DOS.



Not only do you have to erase all of the files, but you have to modify the program manager in Windows to remove the icons. Even then, you may still not be done, as many programs make modifications to your win.ini file and/or your system.ini file. Unless you either know what you are doing or have explicit directions for removing a program, you are skating on thin ice.



Typically, portables have smaller hard drives than desktop computers and every bit of space is to be guarded carefully as no hard drive is ever large enough. Perhaps you have wished for a program that will allow you to remove excess files that creep into Windows systems.

MicroHelp Uninstaller v2 to the rescue! This nifty program installs on your hard drive and lets you simply and easily select any application you want to uninstall and then removes all of its bits and pieces from your hard drive for you. But it does a whole lot more. If you have been running Windows for a while and adding and taking out programs, you can ask this program to clean up your files for you. By selecting Orphan Finder, you can get rid of all the old parts that are left over from long gone programs. Duplicate File Finder does just what its name implies and lets you gain back hard drive space. System cleanup lets you get rid of files that Uninstaller feels are not necessary for the smooth operation of your system. INIClean lets you clean up your INI files of unwanted and unneeded entries that are just taking up disk space.

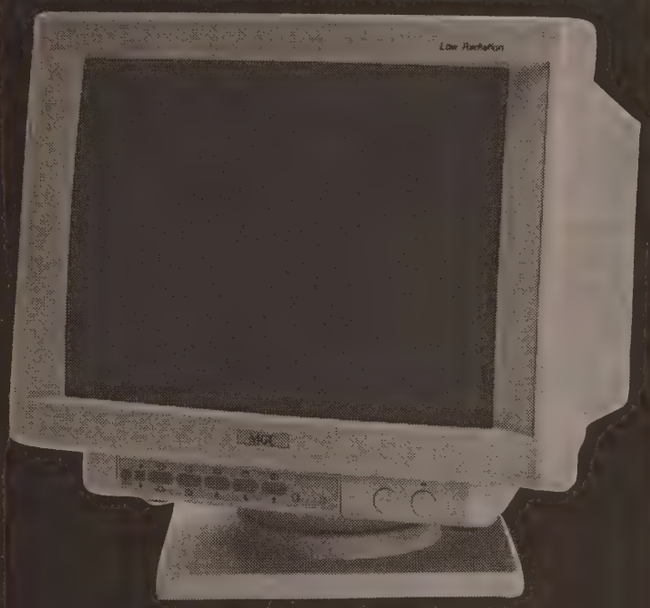
This program makes something that is pretty technical into something that almost anyone with a little patience can master. If you want to do nothing more than have a tool to remove Windows programs that you no longer want, Uninstaller is simple—you can do this without reading any of the documentation. If you want to take advantage of the more sophisticated aspects of this tool, you may have to read specific sections of the manual. I recommend that you spend a little time reading the clear explanations in order to get more from this powerful tool.

Another powerful tool has also come along to help Windows users who do not consider themselves power users or highly technical. PC911 is designed as emergency help when your computer won't boot up properly. Once installed, the program prepares an emergency boot disk that has your essential files. Each time you start your computer, it compares your autoexec.bat, config.sys, win.ini, and system.ini files with what they should be and lets you know if there is any change. This warns you to make a new copy of your emergency start-up disk. At any time, you can go back to a previous version of these essential files and thereby eliminate any problems that either you or your computer caused.

The utilities included with the Uninstaller make it easy for the novice to isolate problems. You can do similar things on your own, but this is an easy way to insure against the unexpected. This program requires only a small amount of disk space and may be worth it in peace of mind. ■

MGC

With the Most Intelligent Graphic Mode Control



MGC-1765VAF 17"

dot pitch	resolution	vertical sync	horizontal sync
0.26mm	1280 x 1024	50-100Hz	30-65KHz

TWO YEARS PARTS & LABOR WARRANTY

MGC®

Earth and your health were the most important concerns our engineers had when making MGC monitors. This 17 inch, state-of-the-art, high resolution monitor delivers clear, rich images at an affordable cost for desktop publishers, as well as for today's demanding business and game applications. It has a power management system which complies with EPA Energy Star and VESA Display Power Management Signaling (DPMS) guidelines. This monitor also complies with the Swedish MPRII (low radiation) for better eye protection.

energy

EPA POLLUTION PREVENTER®

This 17 inch monitor has advanced features and roomy displays. You get premium graphics with a fine 0.26mm dot pitch and a non-interlaced maximum resolution of 1280 x 1024. The screen is also non-glare and anti-static. So you are able to enjoy a larger and sharper picture with minimum eye fatigue!

ISO-9000 Certified

How many times have you tried to adjust your screen in order to see the whole picture and later on you have to do it again for different programs? The 17 inch monitor is equipped with 21 programmable modes for different settings. There are 12 factory presets and 9 custom defined programmable modes. The monitor will detect the setting for the programs you want to run, and save you time and frustration in the future from constant screen adjustments.

2 YEARS PARTS & LABOR WARRANTY

With the flat screen tube design, light reflection disturbances and other distortions common in regular monitors, are eliminated to provide a sharper and more comfortable image.

MPR-II (low radiation)

MGC is committed to bringing you the highest quality monitors with the most affordable prices you will find in this vast market. So, call a local distributor for more information on 14, 15 and 17 inch monitors.

Laptops *continued...*

Computer Of The Month

Hewlett-Packard's OmniBook 600

RESOURCES:
OmniBook 600, $2599 and up
Hewlett-Packard Co.
Inquiries
1000 N.E. Circle Blvd.
Corvallis, OR 97330
1-800-443-1254

Several times over the past couple of years, I have raved about Hewlett-Packard's OmniBook series of sub-compact portables. They have returned yet another time with a winner—the OmniBook 600. Although they still use the OmniBook moniker, and have retained the size and format of its earlier models, the 600 is designed to compete directly with the world of notebook computers. While earlier entries were marked by long battery life rather than a rechargeable nickel metal hydride power pack, they also lacked a color display and backlighting. In order to offer the full backlit color display, the OmniBook needed more power. The new, small nickel metal hydride battery (extras $99) provides the needed power for up to four hours before recharging.

The OmniBook 600, however, is more than just the old OmniBook, which is still available, with a souped up display. It is now powered by a 486 processor running at either 50MHz or 75MHz. The basic system comes in either a 4MB or 8MB RAM configuration, expandable up to either 12MB or 16MB ($399 for an extra 4MB, $649 for an extra 8MB); and the hard drives range from a low end of 171MB up to 260MB. Since the hard drive is a removable PCMCIA card it is likely that even larger drives will be available in the near future and you can swap drives yourself. Hewlett-Packard has positioned this computer as a full-powered notebook, continuing to beat the competition in size and weight.

It weighs in at 3.8lbs. and measures about 8" x 11" with a thickness of just a tad over 1.5". A tiny external floppy drive that holds 3.5" disks comes standard and attaches by an included cable. You have other options for transferring data and files between the OmniBook and a desktop computer. Traveling Software's LapLink Remote is built into the system so you can easily connect the portable to a desktop machine with either a serial or parallel cable. The OmniBook 600 also comes with two PCMCIA slots. These slots are both Type II and stacked one on top of the other in order to offer the flexibility of inserting a single Type III card.

The display is passive matrix color, measuring 8.5" diagonally. It is easy to attach

continued on page 51

Active Business Computer
Tel: (310) 477-7280

Call for other Configuration!!

486 SLC2-66MHz
MINI TOWER CASE
4MB RAM
210MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$825.00

DOS +$45 Windows +$55

486 DX2-80MHz
MINI TOWER CASE
4MB RAM
420MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$1025.00

Windows for Workgroup +$75

Pentium 90MHz
MINI-MID TOWER CASE
8MB RAM
540MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$1899.00

1.2 MITSUMI FLOPPY	$42	CONNER 270MB HD	$165	512K ISA SVGA CARD	$40
1.4 MITSUMI FLOPPY	$32	CONNER 420MB HD	$195	1MB ISA SVGA CARD	$65
1.2 TEAC FLOPPY	$47	CONNER 540MB HD	$225	1MB VESA SVGA CARD	$79
1.4 TEAC FLOPPY	$37	COLORADO 350MB TAPE BACKUP DRIVE			$179

All Prices are Cash Discounted.

Price and Availibility are subject to change without notice.

Services are Available for IBM Compatible and LAN
11919 Santa Monica Blvd. W. Los Angeles, CA 90025

BEST BUYS 50%-70% OFF

Made By IBM

486SLC Subnotebook

- **Fax/Modem** (9600 / 2400)
- **80 MB Hard Drive** (40 MB HD - Double Spaced to 80 MB)
- **Pen Pointing Device** (Cordless Battery Operated)

• 6 MB • 25MHz • 6" Backlit VGA LCD • Serial, Parallel, Keyboard, & SVGA Video Ports • DOS 6 • Windows 3.1 (for Pen) • 9" x 5.5" x 1.25" • Nickel Metal Hydride Battery • 4 Lbs. w/Battery, Keyboard and Carrying Case

$649

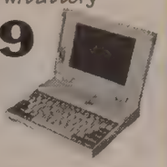
External 3.5" 1.44 MB Floppy Disk Drive Plus Extra Battery Pack with Order Only ..... FREE

6 MB RAM, Ethernet, Math Co-Processor ..... *CALL

MULTIMEDIA NOTEBOOK

486DX4/75MHz • DX4/100MHz
Notebook
4MB Ex. -32MB • 9.5" Display
• TrackBall • VLB IMB • 1.44FDD
• PCMCIA TypeII/III • Serial/Parallel
• Speaker & Microphone • Docking Station (option) • 16Bit Sound System • DOS • Win • CD ROM (Option) • 6.5lbs w/battery

From **$1499**



MAJOR MANUFACTURER

LCD	CPU	HDD	PRICE
Active Color	486DX4-100	520MB	$CALL
Active Color	486DX4-75	520MB	$CALL
Dual-Scan Color	486DX4-75	340MB	$CALL
Dual-Scan Color	486DX2-50	340MB	$CALL
Mono	486DX2-50	340MB	$CALL
Mono	486DX2-50	260MB	$CALL

SYSTEM SPECIALS

IBM 486-66 MHz

- 4MB RAM
- 450 MB Hard Disk Drive
- 1MB Video
- 256K Cache
- 1.44 Floppy Disk Drive
- 2x CD-ROM Drive
- 16-Bit Sound Card
- Speakers
- Keyboard • Mouse

PC DOS • Windows 3.1 • Infopedia, includes: Funk & Wagnalls New Encyclopedia, Roget's 21st Century Thesaurus, and Hammond World Atlas, The World Almanac & Book of Facts • Interactive Story Time • Multimedia Showcase • Great Cities of the World Volume II • Teddy's Big Day

$999

IBM 486 75 MHz

- 4MB RAM
- 420 MB HD
- 3.5" 1.44 FDD
- DOS 6.1
- Mouse • SVGA Accelerator VLB
- 2-VLB Slots

Call for Details

$899

IBM PS/2 E 486SL C2-50MHz PCMCIA Desktops

- 3.5" 1.44MB FDD
- 8MB RAM, 340 MB HDD
- 4 PCMCIA available slots
- Ideal for Networks
- DOS/Windows/Keyboard
- 3 Year IBM Warranty

$699

PS/2 E with 4MB RAM and 340MB HDD $599

486SX-25

- 4MB RAM
- 3.5" FDD
- Cirrus Logic Local Bus Video
- Zif Socket - Overdrive Ready

$499

Unit with 270MB HDD $549

Major Manufacturer

486 DX2-66MHz

Pentium Upgradable

- 4MB RAM, exp. 40MB
- 420 MB HD • 1.44 FDD
- 96 FAX/Modem
- 1MB VLB card
- Dual Speed CD ROM
- 16 bit sound card
- Speakers
- 12 CD Titles
- Keyboard
- Mouse
- DOS 6.2.2, Windows, PFS Works, WinFax and Prodigy
- FCC Class B, UL, CSA

ONE YEAR ONSITE MANUFACTURERS WARRANTY

$1299

TRIGEM PENTIUM P60

- PCI SLOT
- 8MB RAM
- 540 MB HD
- 1.44 FDD
- SVGA Card
- Mini Tower
- Keyboard & Mouse
- 25/1P/1G
- FCC Class B
- ULCSA Appr.
- 1 yr. On-Site warranty

$1499

IBM 486DX2-50MHz PS/1 Towers

- 4MB RAM/250MB
- Dual FDD/KB/Mouse/Local Bus SVGA
- DOS/Windows/MS Works
- Fax Modem w/Software
- RD w/1 Year Warranty

$899

AST & COMPAQ DESKTOP Call for All Models!

Major Manufacturer

486DX2-50MHz Notebook

- 4MB RAM
- 200MB HDD
- Dual Scan Color
- Internal Fax/Modem 110/220 A/C Adaptor
- 1.44 FDD • 5.5 Lbs
- 1 Year Warranty

$1599

TEXAS INSTRUMENTS COLOR NOTEBOOK

486 SX 25MHz

120MB HDD • 4MB RAM • 10" STN Color Display • 3.5" FDD • Clip-on Trackball • 5.9 LBS • DOS 6.2 • Windows 3.1 • Serial/Parallel • VGA • PS/2 Port

$1299

GATEWAY 2000

9.5" Dual Scan Color Notebook

4865X-33, 4MB, 1.44 FDD, TracBall, 2 PCMCIA Slot, 120 MB HD, Serial Parallel, VGA, PS/2 Port, Internal FAX/Modem, DOS 6.22, WFWKGPS 3.11, MS Works for Windows, 1 Year Warranty

$1399

TEXAS INSTRUMENTS NOTEBOOK TI4000E

TFT Active Color

- 486DX2/50MHz
- 4MB RAM
- 200MB HDD
- 1.44 Internal Floppy Drive
- PCMCIA Slot
- Carrying Case
- Trackball
- VGA Port, Serial/Parallel
- PS/2 Port
- Car adapter and Battery charger 110/220V
- DOS • Windows

$1899

Memory Upgrades for Notebooks & Laser Printers: Toshiba, AST, Compaq, IBM, HP, Okidata and others...Call for Details!

AST Advantage

486SX 33, 4MB, 120MB HD, Fax Modem, 1.44 FDD, TracBall, DOS, Windows

$999

IBM THINKPAD

Lexmark 4865LC-25
• 4MB RAM • 80 MB/120MB
• Trackball
• 1.44HD
• DOS • Windows

$899

COLOR NOTEBOOKS

• 386 • 80MHz

Call for details!

$899

386 GRID NOTEBOOK

386 • 4MB RAM
• 80MB HD • 1.44FD • PCMCIA
• Case • Trackball

$599

TOSHIBA NOTEBOOKS

T1850 Mono 80/120	$CALL	T24CT 250/320	$CALL	T4700CT 200/320	$CALL
T1850 Color 80/120	$CALL	T3400 Mono 120/260	$CALL	T4800CT 510MB	$CALL
T1900 Mono 120/200	$CALL	T3400CT 120/260	$CALL	T6400 SX MONO 120	$CALL
T1910 Mono 120/200	$CALL	T3600CT	$CALL	T6400 DX COLOR 120	$CALL
T1910CS 120/200	$CALL	T4400SX 80/120	$CALL	T6400 MM/DX2 50 200	$CALL
T1950 Mono 120/200	$CALL	T4400 SC Color 120/200	$CALL	T6699 C/CD	$CALL
T1950CS 120/200	$CALL	T4500 Mono 80/120	$CALL	T6600 C/CD	$CALL
T1950CT 200/230	$CALL	T4500 Color 120/200	$CALL	T6600 C/CDV	$CALL
T1960CT 200	$CALL	T4600 MONO 120/200	$CALL		
T1960CT 320	$CALL	T4600 COLOR 200/320	$CALL		

Some models are "B" with 1 yr Warranty

PCMCIA PRODUCTS FAX MODEMS

IBM 96.24 Fax Modem
$49
IBM 14.4 Fax Modem
$189
14.4/28.8 Fax Modem
$350
ETHERNET CARD PCMCIA
$179

PRINTERS

ALPS LSX1600e 16ppm Laser Printer

- 300 DPI 2MB (exp to 34MB)
- PCL 5 Emulation (Laserjet)
- 14 Bitmapped, 13 scalable fonts
- 2 Laserjet-compatible font slots
- Network Ready
- 3 Month Warranty

$699

24 Pin Printers
360 DPI 240 CPS
Epson/IBM Emulation, Parallel Interface **$129**
(Wide Carriage **$159**)

MICROSEL, INC.

1787 POMONA RD., SUITE B • CORONA, CA 91720

Voice: 909-734-8767
Fax: 909-734-8683

Photos may not represent actual products
Some Systems may be refurbished

Prices and availability are subject to change without notice. All sales are final. Return for credit must be within 15 days and is subject to 15% restocking fee. Original shipping charges are non-refundable. We are not responsible for compatibility or typographical errors. All equipment carries manufacturer's warranty. Listed prices reflect cash discount. Call for other methods of payment. We check for stolen credit cards.

Hard Drives

Fujitsu 1.05GB Side SCSI	$649
Conner 420MB IDE	$179
Conner 210MB IDE	$149
WD 1.05GB IDE	$449
WD 730MB IDE	$285
WD 540MB IDE	$239
WD 210MB IDE	$165
Quantum 2.1GB SCSI-2	$925
Quantum 1.05GB SCSI-2	$599
Maxtor 540MB IDE	$259
Seagate 560MB IDE	$209
Seagate 420MB IDE	$179

Motherboards

P5-90/100 Dual Processor	$649
P5-90/100 PCI SiS 256K	$219
P5-90 PCI Intel Plato 256k	$395
P5-66/60 PCI, Opti Chipset	$169
486DX4/2 PCI/VLB, 256K	$139
486DX4/2 VLB, 256K	$95
486VLB, 256K, 72/30 Pin	$85
386/486 VLB, 128K	$79
486 SLC/2-66, VLB, 128K	$169
486 DLC-40 w/Math, 128K	$119
486 SLC-33	$69

CPU & Memory

Intel Pentium-100	$949
Intel Pentium-90	$589
Intel Pentium-66	$509
Intel Pentium-60	$419
Intel 486DX/2-66	$209
Intel 486SX-33	$89
AMD 486DX/2-66	$199
AMD 486DX-40	$159
2 x 32 - 70 (72Pin)	$279
1 x 32 - 70 (72Pin)	$139
4 x 9 - 70	$129
1 x 3 - 70	$36

Tape Backup & Floppy

Colorado 350MB	$169
Colorado 250MB	$145
Conner 250MB w/Tape	$139
Teac Dual Drive	$89
Teac 1.2MB Floppy	$45
Teac 1.44MB Floppy	$34
Epson 1.2MB Floppy	$40
Epson 1.44MB Floppy	$29

Controller Cards

4 Floppy Controller	$15
IDE w/ 2S, 1P, 1G	$13
IDE w/16550 UART	
VLB IDE w/ 2S, 1P ,1G	$19
VLB IDE w/16550 UART	$89
PCI IDE	$29
PCI SCSI-2	$69
PCI Adaptec 2940 SCSI-2	$199
PCI Adaptec 2940w SCSI-3	$259

Monitors

21" ViewSonic 21	$1589
20" ViewSonic 20	$1349
17" ViewSonic 17	$799
17" ViewSonic 17G	$689
15" ViewSonic 15	$399
15" ViewSonic 15ES	$319
17" CTX 1765GM	$579
15" CTX 1562GM	$295
14" CTX 1451	$219
17" MAG DX17 .26	$579
15" MAG DX15	$319

Video

PCI ATI Mach64 4MB V	$459
PCI ATI Mach64 2MB V	$259
PCI ATI Mach64 2MB D	$179
PCI Stealth64 2MB V	$295
VLB ATI Mach64 2MB D	$179
VLB ATI Mach32 1MB D	$99
VLB S3-805 1MB	$69
VLB Cirrus 5428 1MB	$69
VLB Trident 9400 1MB	$60
ISA Trident 8900 1MB	$50
ISA Trident 9000 512K	$33

CD-ROM & Multimedia

GoldStar w/Card (2X)	$109
Panasonic 563 (2X)	$119
NEC 510 SCSI-2 (3X)	$259
Toshiba 3501 (4X)	$299
4Plex SCSI-2 (4X)	$425
SB 16 MCD 16 (OEM)	$79
SB 16 MCD 16	$129
SB 16 SCSI-2 (OEM)	$99
SB 16 SCSI-2 ASP	$199
SB AWE32	$259
Acer Magic 16	$69

Keyboard & Mouse

Focus 9000	$49
Focus 2001	$32
Focus 6000	$21
Logitech Mouseman	$42
Logitech Mouseman Bus	$62
Logitech Trackman	$72
MS-Mouse 400dpi	$29
MS-Mouse 200dpi	$21
Hi-Res. Mouse	$9
Trackball	$19

Modems

US Robotics 28.8 Int. V.34.	$209
US Robotics 14.4 Ext.	$119
US Robotics 14.4 Int.	$109
SmartLink 28.8 Int. V.34	$189
SmartLink 14.4 Int.	$69
martLink 14.4 Voice	$89
SmartLink 96/24 Int.	$34

NEW AGE

QUAD SPEED CD-

VL-Bus Ultra

- Intel Pentium OverDrive Ready
- 8MB 70ns RAM
- 256K Fast Cache
- 1.2MB & 1.44MB Floppy Drives
- 420MB 11ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator w/1MB
- 15" 1280x1024 .28 NI Super VGA Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mid Tower Case, 8 Drive Bays

Intel 486DX2-66	*$1249*
AMD 486DX2-66	*$1225*
AMD 486DX-40	*$1175*
Intel 486SX-33	*$1125*

PCI Ultra

- 8MB 70ns RAM, 256K Cache
- 1.2MB & 1.44MB Floppy Drives
- 540MB 11ms Enhanced IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI ATI Mach64 Accelerator w/1MB
- 15" 1280x1024 .28 NI Super VGA Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mid Tower Case, 8 Drive Bays

Pentium-100	*$2249*
Pentium-90	*$1849*
Pentium-66	*$1749*
Pentium-60	*$1649*

VL-Bus Media Pro

- Intel Pentium OverDrive Ready
- 8MB 70ns RAM, 256K Cache
- 1.2MB & 1.44MB Floppy Drives
- 420MB 11ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator w/1MB
- 15" 1280x1024 .28 NI Super VGA Monitor
- Double-Speed (2X) CD-ROM Drive
- Sound Blaster 16-Bit Compatible Sound Card
- 4 Popular CD Software Titles
- 115W Hi-Fi Stereo Speakers
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mid Tower Case, 8 Drive Bays

Intel 486DX2-66	*$1449*
AMD 486DX2-66	*$1425*
AMD 486DX-40	*$1375*
Intel 486SX-33	*$1325*

VL-Bus Media Ultima

- Intel Pentium OverDrive Ready
- 8MB 70ns RAM, 256K Cache
- 1.2MB & 1.44MB Floppy Drives
- 540MB 11ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator w/1MB
- 17" CTX 1765GM .27 NI 1280x1024
- Double-Speed (2X) CD-ROM
- Sound Blaster 16-Bit Compatable Card
- 4 Popular CD Software Titles
- 115W Hi-Fi Stereo Speakers
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mid Tower Case, 8 Drive Bays

Intel 486DX2-66	*$1849*
AMD 486DX2-66	*$1825*
AMD 486DX-40	*$1775*
Intel 486SX-33	*$1725*

THE DYNASYS ASSURANCE

- **30-Day Money Guarantee.**
- **3 Year (System) Labor Warranty**
- **1 Year Parts & Labor Warranty.**
- **4 Year GE On-Site Warranty Optioal.**

MULTIMEDIA

ROM & STUDIO QUALITY SOUND

PCI Media Pro

- 8MB 70ns RAM, 256K Cache
- 1.2MB & 1.44MB Floppy Drives
- 540MB 11ms Enhanced IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI ATI Mach64 Accelerator w/1MB
- 15" 1280x1024 .28 NI Super VGA Monitor
- Double-Speed (2X) CD-ROM Drive
- Sound Blaster 16-Bit Compatible Card
- 4 Popular CD Software Titles
- 115W Hi-Fi Stereo Speakers
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Hi-Resolution Mouse
- Mid Tower Case, 8 Drive Bays

Pentium-100	*$2499*
Pentium-90	*$2099*
Pentium-66	*$1999*
Pentium-60	*$1899*

PCI PowerStation

- 16MB 70ns RAM, 256K Fast Cache
- 1.2MB & 1.44MB Floppy Drives
- 1.05GB 9ms Fast & Wide SCSI Hard Drive
- PCI Adaptec 2940W Wide SCSI Controller Up to 200% Faster than SCSI-2
- PCI ATI Mach64 Accelerator w/2MB World's Fastest Video, 100+ Winmarks
- 17" CTX 1765GM .27 NI 1280x1024
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster AWE32 Sound Card w/Advanced WaveEffects Synthesis
- 4 Popular CD Software Titles
- 115W Hi-Fi Stereo Speakers
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Microsoft Mouse V2.0
- Full Tower Case, 10 Drive Bays

Pentium-100	*$4299*
Pentium-90	*$3899*

PCI Media Ultima

- 16MB 70ns RAM, 256K Cache
- 1.2MB & 1.44MB Floppy Drives
- 730MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI ATI Mach64 Accelerator w/2MB
- 17" CTX 1765GM .27 NI 1280x1024
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster Multi CD 16 Sound Card
- 4 Popular CD Software Titles
- 115W Hi-Fi Stereo Speakers
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- MicroSoft Mouse V2.0
- Full Tower Case, 10 Drive Bays

Pentium-100	*$3399*
Pentium-90	*$2999*
Pentium-66	*$2899*
Pentium-60	*$2799*

CTX EzNote

- 4MB RAM
- 3.5" 1.44MB Floppy
- 260MB IDE Hard Drive
- VL-Bus Graphics w/1MB
- 9.5" Dual Scan Screen
- 16-Bit Stereo Sound & Mic
- Serial, Parallel Port
- 2 PCMCIA Slots (Type II & III)
- 84-Key Keyboard
- 19mm Trackball
- True 3.3-Volt Low Voltage Design
- Docking Station & CD-ROM Support
- 5.9 Pounds including Battery
- Carrying Case; 9.9" x 7.5" x 1.4"

	Mono	Dual Scan	Actrive Matrix
486SX-33	1449	1899	2899
486DX2-50	1599	2049	3049
486DX2-66	1675	2125	3125
486DX4-75	1799	2249	3249
486DX4-100	1899	2349	3349

Upgrade to 8M	*$195*
Upgrade to 16MB	*$550*
Upgrade to 340MB HD	*$75*
Upgrade to 540MB HD	*$190*
PCMCIA 14.4 Fax Modem	*$179*
Additional Battery	*$99*

Industry
15352 East Valley Blvd.
City of Industry, CA 91746
Tel: (818)336-4613
Fax: (818)330-1592
M-F 9:00am - 6:00pm
Sat 10:00am - 5:00pm

Pasadena
1765 East Colorado Blvd.
Pasadena, CA 91106
Tel: (818)583-1988
Fax: (818)583-8869
Mon - Fri 10:00am - 9:00pm
Sat & Sun 11:00am - 8:00pm

DYNASYS
MICRO DEVELOPMENT

For Your Protection we thoroughly investigate all Credit Cards!

* All Prices reflect 3% Cash Discount * Prices & Specifications are subject to change without notice.* Government, School & Corporate PO's are welcome.

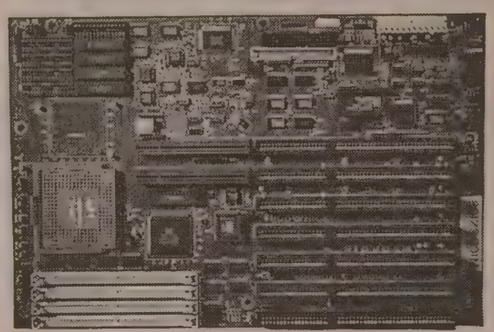
MICRONICS

MICRONICS

MICRONICS

intel inside

MICRONICS



MOTHERBOARDS

ALL MODELS IN STOCK

THE BEAST

$1789

- ★ MICRONICS 90MHz PCI Motherboard/90MHz
- ★ 8MB SIMM Memory: 70ns
- ★ 1.2MB/1.44MB TEAC Floppy
- ★ 420MB Western Digital #2420 Hdrive
- ★ Micronics PCI Hi-Speed Ctlr/Onboard
- ★ Gateway Anykey Programmable Keyboard
- ★ Authorized MICRONICS Distributor
- ★ Many Monitors To Select

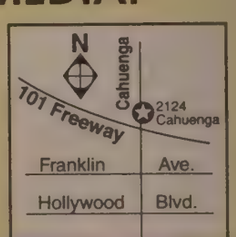
SON OF BEAST

$2299

- ★ MICRONICS 90MHz PCI Motherboard/90MHz
- ★ Stealth 64 Accelerator/2MB
- ★ 16MB SIMM Memory
- ★ 1.2MB/1.44MB TEAC Floppy
- ★ 850MB Western Digital Hdrive
- ★ Micronics PCI Hi-Speed Ctlr
- ★ Gateway Anykey Programmable Keyboard
- ★ Authorized MICRONICS Distributor
- ★ Many Monitors To Select

CUSTOM NETWORKING & MULTIMEDIA.

IBM · HEWLETT PACKARD · TOSHIBA · COMPAQ · MANZANITA SOFTWARE



7th Year, Member of the Better Business Bureau

WE STOCK MICRONICS

MICRONICS is a Member of the VESA & PCI Committee

Authorized MICRONICS Distributor Since 1987

* The Intel Logo is a trademark of the Intel Corporation.

3-6 COMPUTERS

2124 CAHUENGA BLVD. HOLLYWOOD, CA 90068

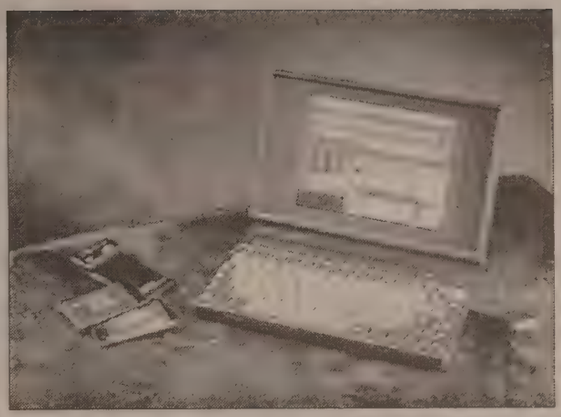
PHONE 213 466-3636 • FAX 213 466-3693

Laptops *continued...*

continued from page 46

an external monitor through the video port on the back of the OmniBook. The keyboard is full size—whatever that means—so you do not have to scrunch your fingers to work on the computer. If you are working at a fixed location, you can purchase a port replicator ($349) which gives you a great deal of added capability. To the replicator, you can attach the floppy drive, printer, serial device, external CD-ROM, network connector, external keyboard, PS/2 mouse, and external display. In short, you can pretty much tap the power of the OmniBook and set it into a much more comfortable setting. The OmniBook simply slips into the port replicator. Slip it out when you are on the go!

The OmniBook series offers a number of unique features. First, when you power down, you simply shut the unit off. When you power up, you will be exactly where you left off. Of course, it is wise to save files and such as a precaution, but it is really convenient to simply shut down and power up to where you left off. A second unique feature is the use of special function keys to open your frequently used applications. There are twelve function keys across the top of the unit. Hitting these in conjunction with the special Fn key brings you into the designated application, saving lots of time. This removes the need to work through the Windows Program Manager to open frequently used applications.



TMS-DOS 6.2, Windows for Workgroups 3.11, and a set of programs that work within a personal information module are also included. While these applications work, I am still astounded that HP has not yet rewritten the phone directory application to allow you to import a telephone and mailing list from another application. For me, it makes this application completely useless as I am not going to reenter the hundreds of names I have in my electronic address/phone file.

There is so much good to say about the OmniBook 600 that it would be unfair to dwell on the one weakness I find. In addition to everything else, Hewlett-Packard provides a three-year warranty. During the first year, they will ship, by overnight delivery, any replacement parts or a whole unit if that is what you need. You simply can't beat either this machine or the company that stands behind it. ■

Copyright © 1995 by Ed Kahn. All rights reserved.

GENESIS COMPUTER SYSTEMS, INC.
4095 E. LaPalma Ave. #J, Anaheim, CA 92807
(714) 632-3648 FAX: (714) 632-8045
OPEN Mon.—Fri. 9:00A.M.—6:00P.M. Sat. 10:00A.M.—5:00P.M.

Multimedia 16 bit $229.00

Conner Maxtor/Quantum
420 MB $169.99
540 MB $199.99

486 DX2 / 66 VLB SYSTEM

486 DX2-66 INTEL CPU w/ cooling fan
GREEN VLB Mother board, 256K Cache,
72 pin SIMM socket, ZIF socket
4 MB RAM 70 ns w/parity
420MB IDE Hard Drive (Brand Name)
14" SVGA NI Monitor 0.28 dp
1.44 mb 3 1/2" FDD (Teac/NEC/Mitsumi)
TRIDENT 9400 1MB SVGA Card
VLB Super IDE I/O 2S,1P,1G Ports
Minitower Case with Digital display
101 Keyboard, Mouse
$949 / 1179*
* With Double Speed CD ROM complete MULTIMEDIA Package

Pentium 60/66/90 PCI SYSTEM

Pentium 60/66/90 CPU w/ fan
PCI Motherboard
256K Cache
4MB RAM, 70 ns w/parity
420MB HDD (Brand Name)
14" SVGA NI Monitor
1.44 MB 3½"FDD (TEAC/NEC)
Trident 1MB PCI SVGA Card
PCI IDE, 2S, 1P, 1G
Midtower Case w/ Digital
101 Keyboard, Mouse
$1269/1379/1569

PARTS & COMPONENTS

MOTHERBOARDS
486DLC-40, 128k Cache w/CPU & Math Coprocessor $119
486DX2-66 VLB, ZIF, 256k Cache w/CPU $255
Pentium 60/66 PCI/VLB/ISA 256k Cache w/o CPU $161
Pentium 90 OPTI PCI/VLB/ISA 256k Cache w/o CPU $229
Pentium 90 Intel chipset w/PCI IDE, FDD cntrlr., & I/O w/o CPU $295

HARD DRIVES
1.08 GB IDE Western Digital $410
1.0 GB Micropolis IDE (5 Year Warranty) $415
1.0 GB Conner SCSI $469

VIDEO CARDS
Trident 9440 VLB 1MB SVGA $65
Cirrus Logic 5428 VLB 1MB SVGA $65
Diamond Stealth 2MB VRAM PCI or VLB SVGA $279
Diamond Stealth 2MB DRAM PCI/VLB $179

MULTIMEDIA
Sound Blaster sound card, Sony CDROM (250 ms.), CD titles, speakers $249
16 bit sound card, Panasonic CDROM (320 ms.), CD titles, speakers $229

MONITORS
14" NI (Generic) $189
14" NI Shamrock $199
15" NI Shamrock digital $289
17" NI Shamrock digital $539
17" MAG (DX 17F) .26 dp digital $589

MISCELLANEOUS
Teac 1.2/1.44 FDD pair $71
Mitsumi 1.2/1.44 FDD pair $69

$$$ SUPER DEALS $$$

486 DLC-40 *full system* $699
75 Mhz IBM Blue Lightning Motherboard w/CPU $210
100 Mhz IBM Blue Lightning Motherboard w/CPU $239

BRAND NAME MEMORY

1 MB 30 pin	$34.50	8 MB 72 pin	$295.00
4 MB 30 pin	$130.00	8 MB 72 pin*	$275.00
4 MB 72 pin	$149.00	16 MB 72 pin	$495.00
4 MB 72 pin*	$139.00	16 MB 72 pin*	$415.00

*no parity

Systems w/ one yr parts & labor waranty Prices & availability subject to change w/o notice. Prices incl cash disc. Not respnsible for typo All trade marks belong to respective companies 72 hour burn-in before shipment

ADVANCED COMPUTER AND

486SX-25 NoteBook
AST Advantage! Explorer
- 120 MB HD Drive - VGA Mono LCD
- 4 MB RAM - 1.44 MB Floppy Disk Drive
- MS-DOS 6- MS Windows V 3.1
- Lotus Organizer
- Prodigy - America Online
- Data/Fax Send/Receive Modem
- WinFax

$949

486SX-25 NoteBook
AST Advantage! Explorer
- 170 MB HD Drive - VGA Mono LCD
- 4 MB RAM - 1.44 MB Floppy Disk Drive
- MS-DOS 6- MS Windows V 3.1
- Lotus Organizer
- Prodigy - America Online
- Data/Fax Send/Receive Modem
- WinFax

$999

Specials

Micropolis 540 MB SCSI II w/Controller $228.00

AST NoteBook Computers

PWR EXEC 4SL/25, 4/200, PASSIVE	$1295
AST PWR EXEC, 486SL/25, 4/200, PASSIVE	$1295
AST PWR EXEC, 486SL/25, 4/200, ACTIVE	$1395
AST BRAVO 486SX/25, 4/120, MONOCROME	$945
AST BRAVO 486SX/25, 4/170, MONOCROME	$975
AST BRAVO 486SX/25, 4/120, PASSIVE	$1235
AST BRAVO 486SX/25, 4/170, PASSIVE	$1265
AST BRAVO 486SX/25, 4/170, ACTIVE	$1595
AST ADV EXPL 4SX/25 4/120, MONOCHROME	$945
AST ADV EXPL 4SX/25 4/170, MONOCHROME	$965
AST ADV EXPL 486SX/25 4/120, MONOCHROME	$945
AST ADV EXPL 4SX/25 4/120, PASSIVE	$1265
AST ADV EXPL 48SX/25 4/120, PASSIVE	$1235
AST ADV EXPL 4SX/25, 4/170 ACTIVE	$1595
AST BRAVO 486SX/33, 4/200, MONOCHROME	$1025
AST BRAVO 4SX/33, 4/200, PASSIVE	$1395
AST ADV EXPL 486SX/33, 4/120, MONOCHROME	$965
AST ADV 4SX/33, 4/120 MONOCHROME	$995
AST ADV 4SX/33, 4/200, MONOCHROME	$1075
PWR EXEC 4SL/33, 4/200, ACTIVE	$1545
PWR EXEC 4SL/25, 4/200, MONOCHROME	$925

Call for other ASTproducts

TOSHIBA NoteBook Computers

PORTÉGÉ *T3600CT 250MB* — *Active Matrix Color Display*
- Intel 486DX 50MHx Processor
- 8MB RAM • 250MB HD
- 1.44MB Floppy Drive
- 1 PCMCIA Slot/VGA Display
- AccuPoint Mouse
- MS DOS 6/Windows 3.1
- 3 Year Warranty

$3399.00

PORTÉGÉ *T3400CT 120MB* — *Active Matrix Color Display*
- Intel 486Sx 33MHz Processor
- 4MB RAM
- 120MB HD
- 1.44MB Floppy Drive
- 1 PCMCIA Slot/VGA Display
- AccuPoint Mouse
- MS DOS 6/Windows 3.1
- 3 Year Warranty

$1995.00

T1910 486SX/33, 200MB, STN MONO	$1299.
T1910CS 486SX/33, 200MB, STN COLOR	$1799.
T1960CS/200MB, 486DX2/50,DUAL-SCAN	$2099.
T1960CS/320MB, 486DX2/50, DUAL-SCAN	$2269.
T1960CT/200MB, 486DX2/50, TFT COLOR	$2679.
T1960CT/320MB, 486DX2/50, TFT COLOR	$2839.
T2400CS/250MB, DX2/50, DUAL-SCAN CLR	$2679.
T2400CS/320MB, DX2/50, DUAL-SCAN CLR	$2789.
T2400CT/250MB, 486DX2/50,8MB, TFT CLR	$3249.
T2400CT/320MB, DX2/50, 8MB, TFT COLOR	$3369.
T4700CT 486DX2/50, 200MB HD, 8MB CLR	$3829.
T4700CT 486DX2/50, 320MB HD, 8MB CLR	$4299.
T4800CT 486DX4/75, 500MB HD, TFT CLR	$4659.
T6600C 486DX2/66, 510MB HD, TFT-LCD	$5349.
T6600C/CD 486DX2/66, 510MB, TFT-LCD	$5849.

TOSHIBA
T-4700 CT
- Intel 486DX2-50
- 8MB RAM
- 200/320 MB Hard Drive
- Trackball
- DOS & Windows
- 3 Year Warranty

$3829/ $4099

Call for other TOSHIBA products

IBM ThinkPad
510Cs 200MB SUBNOTE STN COLOR DISPLAY
- IBM 486SLC2 50MMHz
- 200MB HD • 4MB RAM
- 3.5" 1.44 Floppy Drive
- 1 PCMCIA Slot
- Track Point Mouse
- Color VGA Display
- PC DOS 6.3
- 1 Year Warranty

$1680.00

IBM ThinkPad
755Ce 340MB New Model 100MHz Color Notebook!
- Intel 486 DX4 100MHz
- 340MB HD 8MB RAM
- 3.5" 1.44 Floppy Drive
- 2 PCMCIA Slots
- Track Point Mouse
- 10.4" Active Color Display
- IBM DOS 6.3 & Windows 3.1
- 3 Year Warranty

$Call

IBM ThinkPad
360Cs 170MB STN Color Notebook
- Intel 486 SX 33MHz
- 170MB HD (340MB Available)
- 4MB RAM
- 3.5" 1.44 Floppy Drive
- 2 PCMCIA Slots
- Track Point Mouse
- STN Color Display
- IBM DOS 6.3 & Windows 3.1
- 1 Year Warranty

$2295.00

ThinkPad 360CE 340MB
DX 50MHz Active Color....$3629

755Cs 340MB
STN COLOR DISPLAY
- Intel 486DX2 50MHz
- 340MB HD (540MB Available)
- 4MB RAM
- 3.5" 1.44 Floppy Drive
- 2 PCMCIA Slots
- Track Point Mouse
- 9.5" STN Color Display
- IBM DOS 6.3 & Windows 3.1
- 3 Year Warranty

$3649.00

IBM NoteBooks

ThinkPad 360	170/340	$1849/$2229
ThinkPad 360CS	170/340	$2279/$2649
ThinkPad 360C	170/340	$2745/$2889
ThinkPad 360CSE	170/340/540	$2529/$2929/$3279
ThinkPad 755CS 50MHz	170/340/540	$3199/$3649/$4049
ThinkPad 755CS 75MHz	170/340/540	$3669/$4149/$4499
ThinkPad 755C 50MHz	170/340/540	$4259/$4719/$5079
ThinkPad 755C 75MHz	170/340/540	$4629/$5089/$5499

- 755CE 540MB.....$6645
- 755CE 810MB.....$7195

Call for other IBM products

Location 1
(714) 670-6321
Fax (714) 670-6322
7342 Orangethorpe Ave.
Suite #A-102
Buena Park, CA 90621

Location 2
(310) 618-6912
Fax (310) 618-6914
2430 Torrance Blvd
Suite # E
Torrance, CA 90501

TECHNOLOGY

We Will Try To Beat Any Advertised Price!

3 MONTHS SAME AS CASH!

420 MB IDE $164.99

540 MB IDE $189.00

486DX2-66 MOTHER BOARD With 256k Cache & 3 VLB Slots $199.00

Specials

MOTHERBOARDS WITH CPU

386DX-40 128k Cache	$82.00
486SLC2-50	$85.00
486DLC-40 w/Math Co	$119.00
486SLC2-66 IBM VLB w/Math Co	$149.00
486DX2-66 VLB 256k Cache Overdrive ready Intel	$249.00
486DX2-80 VLB 256k Cache AMD	$259.00
486DX4-100 (AMD)	$349.00
486DX4-100 (Intel)	$479.00
Pentium 60 PCI 256k Cache	$549.00
Pentium 66 PCI 256k Cache	$599.00
Pentium 90 PCI 256k Cache	$809.00

MEMORY

1 MEG SIMMS 70n/s	$33.50
4 MEG SIMMS 70n/s	$120.00
4 MEG 72 Pin	$135.00
8 MEG 72 Pin	$269.00
16 MEG 72 Pin	$415.00

NETWORK CARDS

Ethernet 16 Bit (NE2000)	$35.00
Novel Netware 3.12 5U	$569.00
Novel Netware 3.12 10U	Call

Please call for other cards

I/O CARDS

AT I/O SUPER IDE	$12.00
AT I/O Local Bus w/IDE	$17.00
PCI Controller	$25.00
SCSI Controller Card	$49.00

TAPE BACKUP

Colorado 250	$145.00
Conner 250 w/tape	$129.00
Conner 420 w/tape	$179.00
Trackker 250	$319.00
Tape cartridge 2120	$12.00

HARD DRIVES

420MB IDE	$164.99
540MB IDE	$189.00
730MB IDE	$259.00
730 SCSI	$299.00
1 GB IDE	$399.00
1.08GB SCSI	$479.00

ACCESSORIES

MiniTower case w/ps	$35.00
MidTower case w/ps	$55.00
FullTower case w/ps	$69.00
Desktop case w/ps	$45.00
1.2MB FD 5 ¼"	$42.00
1.44MB FD 3 ½"	$32.00
Keyboard 101	$15.00
Keyboard 101 Professional	$22.00
Keyboard Focus 2001	$34.00
Mouse	$7.00
Track Ball	$20.00

FAX MODEMS

Fax Modem 14.4	$59.00
Voice Fax Modem 14.4	$69.00
US Robotics 14.4	$99.00
US Robotics 14.4 External	$109.00
US Robotics 28.8 Internal	$219.00
US Robotics 28.8 External	$239.00

CD ROM DRIVES

CD Rom Panasonic 562 300ms dbl speed	$109.00
Mitsumi FX001-D IDE	$115.00
Toshiba 3401B 200 ms	$269.00
Toshiba Quad Speed	$299.00
NEC CDR 510 3XI	$259.00
Mitsumi Quad Speed	$199.00

HEWLETT PACKARD

INKJET PRINTERS

Deskjet 540	$275.00
Deskjet 560C	$445.00
Deskjet 1200C	$1249.00

LASERJET PRINTERS

HP 4 Plus w/Toner	$1325.00
HP 4M Plus w/Toner	$1785.00
HP 4P w/Toner	$899.00
HP 4MP	$1275.00
HP 4L w/Toner	$619.00
HP 4L M w/Toner Compl.	$950.00
HP 4SI w/Toner	$2775.00
HP 4 V	$1820.00

SCANNERS

HP IICX	$869.00

CREATIVE

SoundBlaster 16 Basic	$95.00
SoundBlaster 16 MCD	$99.00
SoundBlaster 16 MCD ASP	$159.00
SoundBlaster 16 SCSI-2	$115.00
SoundBlaster 16 SCSI-2 ASP	$179.00

MULTI MEDIA UPGRADE KITS

MULTI MEDIA KIT

- SONY CD ROM Double Speed
- 16 bit Sound Card
- Amplified Speakers/ Microphone
- 10 CD Titles $199.00

Discovery CD8 Upgrade Kit	$189.00
CREATIVE LABS Digital School House	$259.00

NEC Monitors

SVGA 14"	1024X768	$325
MULTISYNC 3V 15"	1024x768	$475
MULTISYNC 3FGE 15"	1024x768	$575
MULTISYNC 4FGE 15"	1024x768	$649
MULTISYNC 5FGE 17"	1024x768	$975
MULTISYNC 5FGP 17"	1280x1024	$1095
MULTISYNC 6FGP 21"	1280x1024	$1929

View Sonic

V6E 14" .28 NI 1024x768 Green	$249
V15ES 15" Flat .28 NI 1024x768 [1]	$319
V15 15" Flat .27 NI 1280x1024 Digital[1]	$389
V15G 15" Flat .28 NI 1280x1024 Digital[1]	$359
V17E 17" Flat .28 NI 1280x1024 MAC[1]	$659
V17G 17" Flat .28 NI 1280x1024[1]	$679
V17 17" Flat .27 NI 1600x1280 MAC[1]	$799
V20G 20" Flat .28 NI 1600X1280 MAC[1]	$1199
V20 20" Flat .28 NI 1600x1280 MAC MPR-II	$1389
V21 21" Flat .28 NI 1600x1280 MAC[1]	$1589
V21PS 21" Flat .25 NI 1600x1280 Super Dark MAC[1]	$1599

MAG

MAG DX15F 15" .28 NI 1280X1024 MPR-II Green	$339
MAG DX17F 17" .26 NI 1280X1024 MPR-II Green	$629
MAG MX15F 15" .28 NI 1280X1024 MPR-II Auto-Sizing	$449
MAG MXP17F 17" Flat .26 NI 1600X1280 Anti-reflection coating MPR-II Green	$879
MAG MX21F 21" .28 NI 1600X1280 MPR-II Green	$1599

MONITORS

SVGA 14".28 NI	$195.00
SVGA 15" .28 NI	$279.00
SVGA 17" .26 NI	$539.00

VIDEO CARDS

Diamond SpeedStar Pro VLB 1MB	$97
Diamond Stealth 64VLB 2MB DRAM/VRAM	$185/295
Diamond Stealth 32 PCI 2MB	$159
Diamond Stealth 64 PCI 2MB DRAM/VRAM	$189/299
Diamond Viper SE PCI 2MB VRAM	$269
Diamond Viper SE VL 2MB VRAM	$299
Diamond Stealth 32 VLB	$149
1MB Trident VLB	$64
1MB Cirus Logic VLB	$64
1MB Trident ISA	$56

Pentium 60/66/90

- 256 k Cache
- 8 MB RAM 70ns
- 540 MB HDD
- 32 Bit Controller Card
- 2S,1P, 1G Port
- PCI 32 Bit SVGA Card 1Meg
- 1.44 Floppy Drive
- 101 Keyboard Enhanced
- Hi Resoluton mouse
- Midtower case w/ 230 Watt P/S
- 14" SVGA monitor N.I.

$1399.00 /$1449.00 /$1669.00

486DX2-80/DX4-100

AMD

- 486DX2-80 VESA w/256k Cache
- 4MB Ram 70 n/s
- VLB Graphics Card w/1MB
- VLB IDE CARD
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

$899/$999

486DX2-66 VLB

- 486DX2-66 VESA w/256k Cache
- 4MB Ram 70 n/s
- VLB Graphics Card w/1MB
- VLB IDE CARD
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

$859.00

486SLC2-66 w/VLB MathCo

- 486SLC2-66 VLB w/MATHCO
- 4MB Ram 70 n/s
- VLB SVGA w/1MB
- VLB IDE I/O Cont.
- DIGITAL Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

$799.00

486DLC-40 w/MathCo

- 486DLC-40 w/128k Cache & MATHCO
- 4MB Ram 70 n/s
- SVGA Card
- SUPER IDE I/O CONT.
- Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" NI SVGA Monitor .28
- Mouse

$709.00

486SLC2-50

- 486SLC2-50
- 4MB Ram 70 n/s
- SVGA Card
- SUPER IDE I/O CONT.
- Digital Mini Tower
- 101 Keyboard
- 1.44MB FDD
- 420 MB IDE HD
- 14" SVGA Monitor .28
- Mouse

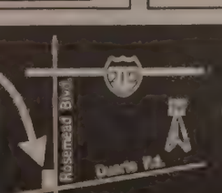
$679.00

Location 3

(818) 237– 2020

Fax (818) 451– 0543

6913-B Rosemead Blvd.
San Gabriel CA 91775



Location 4

(212) 967–1616
Fax (212) 967-0872
146 W. 29th St., 10th Fl.
New York, NY 10001

Financing Available

MasterCard

DISCOVER

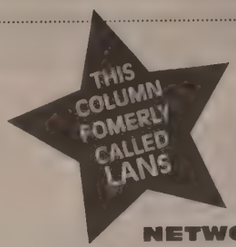
VISA

All systems come with a one year parts and labor warranty. Prices are subject to change without notice.

Not responsible for typographical errors.

All product names are trademarks of their respective companies.

All prices are cash / check



NETWORKING • BY PETER JOHN HARRISON

Connecting Your LAN To The Internet

First In A Three-Part Series Of Articles That Will Explain What's Involved In Setting Up An Internet LAN Connection.

RESOURCES:

Internet Access Providers—An International Resource Directory
Greg R. Notess
1994, Mecklermedia
ISBN 0-88736-933-2

With the importance of the Internet growing by leaps and bounds, many companies are coming to the conclusion that an Internet connection is an important and necessary business tool. The first symptom of the Internet's growing importance as a business tool has been the prevalence of Internet email addresses printed on people's business cards and stationery. Now many companies, large and small, are establishing a presence on the World Wide Web, and not just computer firms. Companies of every size and type are setting up shop on the Net, from financial services giant Visa USA, which has a series of Web pages describing their services and where to report lost credit cards, to the tiny About Time Music Company, which has an online catalog of music CDs on the Web, complete with sound bytes.

The Internet's growing popularity has prodded many companies to look into connecting their corporate LANs to the Internet, but connecting a LAN to the Net is a big project, and there are many more LAN environments looking to connect to the Net than there are LAN administrators who know how to do it. This column is the first in a three-part series of articles that will explain what's involved in setting up an Internet LAN connection.

The first step in connecting a LAN to the Net is to figure out how your company plans to use the Internet. If all your company wants to do is be able to send and receive email, for example, the requirements for your Internet connection will be very different from a company that wants to set up its own Web server and use it to advertise services on the Internet. The best way to do this is to start figuring out who in your organization needs access to the Net, which Internet resources they need access to, and what information your organization wishes to make available to other users on the Internet. Once you have a clear idea of what you plan to use the Net for, you can start planning your installation.

An Internet connection is a lot like a telephone line. At one end of the line you have your phone, and at the other, the telephone company. Your phone can have many special features built into it, like a "speed dialer" and answering machine, but you can also buy these same features from the phone company. When you order your phone line you have to decide what features you want, and whether you want to hassle with buying and maintaining a phone with those special features, or just let the phone company provide those services to you. Also like a telephone line with the phone company, different Internet access providers offer different services, and charge differently for those services, but unlike the phone company, you don't have to put up with just one choice when it comes to a provider.

> The first symptom of the Internet's growing importance as a business tool has been the prevalence of Internet email addresses printed on people's business cards and stationery.

Typically, there are several different Internet access providers to choose from, and you should try contacting several different providers before you buy in to a particular service. Once you know how you plan to use your Internet connection, you should start contacting some of your local Internet access providers and tell them what your plans are (the *Internet Access Providers* book, mentioned in the Resources list that accompanies this article ,is a good place to find the names and addresses for many Internet access providers). Be prepared to answer questions about how you plan to use the Net, how many workstations are on your LAN, and what your experience level is with TCP/IP networking. Once you've explained all this to the access provider, he or she should be able to start formulating a proposal for how to set you up.

Ask lots of questions while you're trying to decide on an Internet access provider, like do they have "round the clock" technical support? Can they provide references? What special services do they offer? And of course you'll want to ask ,"How much does all this cost?" ı 'ake sure you're comfortable with the provider you select. The quality of your connection and your company's image on the Internet will depend a great deal on how good a job your access provider does, and it's a pain in the behind to switch vendors if you discover you've made the wrong choice.

The first hurdle you'll have to cross when establishing what kind of service your Internet access provider should provide you with is the type of telephone con-

continued on page 195

QUALITY FROM THE COMPANY YOU KNOW & TRUST!

MONITORS

NANAO

F340iW	15"	.28	1280 X 1024	$649
F550iW	15"	.28	1280 X 1024	949
T217	17"	.25	1600 X 1200	1299
F560iW	17"	.28	1280 X 1024	1199
T560i	17"	.25	1280 X 1024	1399
T660i	20"	.28	1280 X 1024	1949
F760iW	21"	.31	1280 X 1024	1849
F780iW	21"	.26	1600 X 1280	3099
T220	20"	.30	1600 X 1200	1999

MAG INNOVISION

MX 15	15"	.28	1280 X 1024	$425
DX 15FG	15"	.28	1280 X 1024	325
MXP 17	17"	.26	1600 X 1280	899
MX 17FG	17"	.26	1280 X 1024	799
DX 17F	17"	.26	1280 X 1024	649
MX 21F	21"	.28	1600 X 1280	1699

VIEW SONIC

4E 14"	Super VGA	.28	1024 X 768	$289
6E 14"	Super VGA NI	.28	1024 X 768	299
14E 14"	Super VGA NI	.28	1024 X 768 70Hz	349
15E 15"	Flat Screen NI	.28	76Hz refresh	389
15EX15"	Flat Screen NI	.28	1280 x 1024	445
17E 17"	Digital Multi-Freq.	.28	1280 x 1024	725
17G 17"	Digital Multi-Freq.	.28	1600 x 1280	749
15 15"	Digital Multi-Freq.	.28	1280 x 1024	455
17 17"	Digital Multi-Freq.	.28	1600 x 1280	829
20 20"	Digital Multi-Freq.	.28	1600 x 1280	1499
21 21"	Digital Multi-Freq.	.28	1600 x 1280	1649

NEC

3V	15"	Multi-Freq Green EPA	.28	$449
3FGe	15"	Color Monitor	.28 1024 x 768	575
4FGe	15"	Multi-Freq	.28 1024 x 768	650
5FG	17"	Multi-Freq	.28 1024 x 768	1099
17XE	17"	Multi-Freq.	.28 1024 X 768	975
21XE	17"	Multi-Freq	.28 1024 X 768	2049

BUNDLES

MAG DX-15F + DIAMOND ssPRO	$479
MAG MX-15F + ORCHID KELVIN E-Z	549
MAG DX-17F + ATi Ultra Plus 2MBO	849
MAG MX-17FG + DIAMOND Viper SE 2MB/4MB	999/1149

Call for our other MONITOR, GRAPHIC, & MOTHERBOARD BUNDLES!

SYSTEM BOARDS

AMI

(Made in USA)
(w/CPU, OK Memory)

Titan Dual Pentium EISA/PCI	$1799
Atlas Pentium PCI 90	1099
Excaliber Pentium EISA/PCI 60	1099
Excaliber Pentium PCI 60MHz	799
Excaliber Pentium VLB 60MHz (No CPU)	299
Enterprise IV 486DX2-66MHz EISA VLB	649
Enterprise IV 486DX-50MHz EISA VLB	725
Enterprise IV 486DX-33MHz EISA VLB	599
Super Voyager III 486DX2-66MHz VLB	549
Super Voyager III 486DX-33MHz VLB	499
Super Voyager III 486SX-33MHz VLB	399
Super Voyager III 486SX-25MHz VLB	339

MYLEX

Largest Selection
ISA, VLB, EISA, Pentium
Lowest Prices Guaranteed

MICRONICS

M5Pi Pentium 60MHz PCI	$799
M5Pi Pentium 90MHz PCI	999
M5PePentium 60MHz PCI EISA/PCI	CALL
M5PePentium 66MHz PCI EISA/PCI	1099
EV 486 DX 33/66MHz EISA VLB	499/599
E3 486 DX 33/60	499/599
MX-30 486 DX2-33/66MHz VLB	399/499
JX 30 DX 33/66MHz (w/ IDE I/O)	399/499

AIR

(Made in USA) (No CPU)

486 VLB	$149
486 VLB/EISA	349
Pentium 90 ISA/EISA/PCI	CALL
Dual Pentium EISA/PCI SCSI II Wide-IDO-I/O	1599

SUPER MICRO
(Made in USA)

PENTIUM 60/66 PCI/VLB	$699/799
PENTIUM 90/100 PCI/VLB	999/CALL

TYAN
(Made in USA)

PENTIUM 90/100 PCI/EISA/VL	CALL
486 ISA/EISA/VL	CALL

ASUS

PENTIUM EISA/PCI 90/100	CALL
PENTIUM ISA/PCI 90/100	CALL
486DX2-66 ISA/PCI	$499

ATTN: All ASUS Boards have Integrated FD/HD/IO'S

HARD DRIVES

MICROPOLIS®

4110 IDE/SCSI 1.2GB 3.5"	$599
2217 IDE/SCSI 1.7GB 3.5"	899

BEST PRICES GUARANTEED ON ALL OTHER MODELS

Maxtor®

7171 A/S 3.5"	$149
7345 A/S 3.5"	179/199
HD 540 A/S 3.5"	279/325

MONTH'S SUPER SPECIALS

WD 2420 425MB Hard Drive	$195
WD 2520 540MB Hard Drive	239
Micropolis MC2210A 1 GB Hard Drive	399
Micropolis MC2217A 2.06 GB Hard Drive	**649**
Micropolis MC1936 3.1GB Hard Drive	1179

WESTERN DIGITAL

CAV 2200	IDE 3.5"	12ms	210MB	CALL
CAV 2250	IDE 3.5"	12ms	250MB	CALL
CAV 2340	IDE 3.5"	12ms	340MB	CALL
CAV 2420	IDE 3.5"	12ms	420MB	CALL
CAV 540	IDE 3.5"	12ms	525MB	$249
CAV 1.0	IDE 3.5"	12ms	1GB	499

RAID

We've got the LARGEST selection of the FASTEST Disk Raid Subsystems Available on the Market. CALL one of our EXPERT TECHNICIANS TODAY!!!

Seagate

ST-31200N 1GB	$599
ST-12550N 2.1GB	1199
ST-12450N/W	CALL/1599
ST-32550N/W	1299/1399
ST-12400N 2.1GB	899
Seagate 15150 SCSI 8ms	2099

PC POWER & COOLING

270W SILENCER	$169
300W TURBO-COOL	179
450W TURBO-COOL	329

CONTROLLERS

AMI FASTDISK	EISA / CACHING	$399
AMI FASTDISK	EISA / NON-CACHING	219
AMI FASTDISK	VLB 32Bit CACHE	399
AMI FASTLAN	SCSI II / ETHERNET	425
AMI FASTLAN	ETHERNET	329
MYLEX DCE	EISA / SCSI II CACHING	449
MYLEX LNE	EISA / ETHERNET	299
ADAPTEC	2742 EISA / SCSI II	375
ADAPTEC	1542B ISA / SCSI II	259
PROMISE	VLB IDE / CACHING	125
ADAPTEC (PCI)	2940/2940W	229/299

VIDEO ADAPTORS

DIAMOND
Computer Systems, Inc.

SPEED STAR PRO VLB	$109
SPEED STAR 64 PCI	145
STEALTH 24 VLB/ISA w/1MB	155
STEALTH 64 VLB/PCI 2MB/4MB	279/449
Viper VLB/PCI 2MB	279

ORCHID

BRAND NEW KELVIN 64 VLB/PCI 1/2MB	$149/199
BRAND NEW KELVIN E-Z VLB/PCI 1/2MB	109/149

Fahrenheit VLB w/ Sound 1MB/2MB
BRAND NEW! Fahrenheit 64, 64 Pro & Prodesigner 64
CALL FOR BEST PRICES!

ATi

Ultra Plus Turbo 64 VLB/PCI 2/4MB	$299/499
Ultra Plus Turbo 64 VLB/PCI 2/4MB	249/449
Ultra Plus/Pro 32 VLB/PCI 2MB	199/249
WONDER MACH 32 VLB/PCI 1MB	119

ALL OTHERS CALL!!!

matrox

ISA/VLB/PCI All in Stock
Call for Best Prices

MULTIMEDIA

SONY/SANYO CD-ROM	$149
TOSHIBA 3501 CD-ROM QUAD-SPD.	299
NEC 3 Speed 510 CD-ROM	379
TEAC QUAD Speed	279

CALL FOR OUR CD-ROM, SOUND CARD BUNDLE PACK SPECIALS!!!

SYSTEMS / CASES

ATTENTION!!!

WE CUSTOM CONFIGURE SYSTEMS TO YOUR SPECIFICATIONS. TAILORED TO YOUR BUDGET & KNOWLEDGE. ALL COMPONENTS ARE

DIAMOND CASES

MINI TOWER 230W MID / FULL TOWER 250W
SUPER TOWER 300W HEAT FAN

WE ARE ONE OF THE LARGEST OEM ASSEMBLY HOUSES ON THE WEST COAST WITH TRAINED TECHNICIANS TO ANSWER ALL YOUR SUPPORT NEEDS.

Open M-F
8AM-6PM

- Prices Subject to Change
- Not Responsible for Typographical Errors

Serving you for 10 Years

SOFT HARD SYSTEMS

(818) 999-9531
(818) 999-9683 FAX
6301 DeSoto Ave. Suite C.
Woodland Hills, CA 91367

WEST TECH Wholesale to the Public

FEBRUARY SYSTEM SPECIALS

486 VLB STAR

Intel 486 DX2-66 ..... $949.00
AMD 486 DX2-80 ..... $949.00

- Intel Pentium Technology Ready
- OPTI 486 VLB MB w/256K Cache
- 4 MB Ram (70ns)
- 1.44 FDD 3.5"
- 32 Bit VLB IDE (2S, P, G) Controller
- 32 Bit Window Accelerator w/1 MB
- Dos 6.22 and Windows 3.1, Add $85
- 420 MB IDE HDD
- Mini Tower Case
- 14" SVGA Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse

PENTIUM PCI SUPREME

Pentium 90 MHz $1799.00

- Pentium PCI MB w/256K Cache
- 8 MB Ram (70ns)
- 1.44 FDD 3.5"
- PCI IDE (2S, P, G) Controller
- 540 MB IDE HDD
- Diamond Stealth 64 PCI w/1 MB
- Dos 6.22 and Windows 3.1, Add $85
- Mini Tower Case
- 15" SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse

486 VLB SUPREME MULTI-MEDIA

Intel 486 DX2-66 ..... $1199.00
AMD 486 DX2-80 ..... $1199.00

- Intel Pentium Technology Ready
- Mid Tower Case w/230w PS
- OPTI 486 VLB MB w/256K Cache
- 4 MB Ram (70ns)
- 1.44 FDD 3.5"
- 32 Bit VLB IDE (2S, P, G) Controller
- 32 Bit Window Accelerator w/1 MB
- Sound Blaster 16 MCD Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 420 MB IDE HDD
- SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse
- 2x (Double Spin) CD-Rom
- 40 Watt AMP Speakers
- 4 Deluxe CD Titles

PENTIUM PCI SUPREME MULTI-MEDIA

Pentium 90 MHz $2199.00

- Pentium PCI MB w/256K Cache
- Mid Tower Case w/230w PS
- 8 MB Ram (70ns)
- 1.44 FDD 3.5"
- PCI IDE (2S, P, G) Controller
- 850 MB IDE HDD
- Diamond Stealth 64 PCI w/2 MB
- Sound Blaster 16 MCD sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 15" SVGA-NI Monitor
- 101 Key Keyboard
- High Resolution Serial Mouse
- Teac 4x (Quad Spin) CD-Rom
- 80 Watt AMP Speakers
- 4 Deluxe CD Titles

486 VLB SUPREME PLUS

AMD 486 DX4-100 ..... $1999
AMD 486 DX2-80 ..... $1899
Intel 486 DX2-66 ..... $1899

- Intel Pentium Technology Ready
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 850 MB IDE HDD
- 32 Bit VLB IDE controller
- Diamond Stealth 64 VLB w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Mid Tower Case w/ 5 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

486 PENTIUM PCI SPEED STAR

Pentium 100MHz $3399
Pentium 90MHz $2849
Pentium 60MHz $2649

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1 GB SCSI II 10 ms HDD
- PCI SCSI II Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

PENTIUM PCI SPEED STAR PRO

Pentium 100MHz $3699
Pentium 90MHz $3249
Pentium 60MHz $3049

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1.06 GB Fast Wide SCSI-3 HDD
- Adaptec 2940W PCI Wide SCSI-3 Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85

486 VLB SUPREME PLUS MULTI-MEDIA

AMD 486 DX4-100 ..... $2399
AMD 486 DX2-80 ..... $2249
Intel 486 DX2-66 ..... $2249

- Intel Pentium Technology Ready
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 850 MB 11ms Enhanced IDE HDD
- 32 Bit VLB IDE controller
- Diamond Stealth 64 VLB w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Key Keyboard
- High Resolution Mouse
- Premium Mid Tower Case w/ 5 Drive Bays
- 16 Bit Sound Blaster Compatible Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 4x (Quad Spin) CD-Rom
- 14 CD Titles
- 100 Watt Hi-Fi Speakers

PENTIUM PCI SPEED STAR MULTI-MEDIA

Pentium 100MHz $3599
Pentium 90MHz $3149
Pentium 60MHz $2949

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1 GB SCSI II 10 ms HDD
- PCI SCSI II Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 101 Key Keyboard
- High Resolution Mouse
- Premium Full Tower Case w/ 8 Drive Bays
- Dos 6.22 and Windows 3.1, Add $85
- Teac 4x (Quad Spin) CD-Rom
- Sound Blaster Sound Card
- 14 CD Titles
- 100 Watt Hi-Fi Speakers

PENTIUM SPEED STAR PRO MULTI-MEDIA

Pentium 100MHz $4099
Pentium 90MHz $3649
Pentium 60MHz $3449

- Pentium PCI Mother Board
- 16 MB Ram, 256K Fast Cache
- 1.2 and 1.44 MB Floppy Disk Drives
- 1.06 GB Fast Wide SCSI-3 HDD
- Adaptec 2940W PCI Wide SCSI-3 Controller
- Diamond Stealth 64 PCI w/ 2 MB
- MAG 17" SVGA-NI Digital .28 DP Monitor (1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- Premium Full Tower Case w/ 8 Drive Bays
- Toshiba 3501 4x (Quad Spin) CD-Rom
- Sound Blaster 16 SCSI II Sound Card
- Dos 6.22 and Windows 3.1, Add $85
- 14 CD Titles
- 100 Watt Hi-Fi Speakers
- 101 Key Keyboard
- High Resolution Mouse

You can do it all with West Tech's various computer solutions!

PARTS

SYSTEM BOARDS

Intel Pentium PCI 90 w/256K Cache	$329.00
SiS Pentium PCI/VLB 90 w/256K Cache	$198.00
OPTI Pentium PCI/VLB 90 w/256K Cache (includes onboard IDE &IO interface)	$239.00
OPTI Pentium PCI/VLB 90 w/256K Cache	$219.00
OPTI PentiumPCI/VLB 60/66 w/256K Cache	$199.00
OPTI Mini 486 VLB w/256K Cache(72 Pin)	$99.00
OPTI Mini 486 VLB w/256K Cache(Combo)	$97.00
Ampton 6900-486 w/256K Cache(Combo)	$98.00
Forex Mini 486 VLB w/256K Cache(Combo)	$94.00
Vega (USA) 486 VLB w/256K Cache(72 Pin)	$149.00
Vega (USA) 486 VLB w/256K Cache(30 Pin)	$139.00
Amptron 486 DLC-40 w/128K Cache w/CPU	$119.00
Amptron 386 DX-40 w/128K Cache w/CPU	$95.00

Please call for pricing on AMI, Asus, and Micronics motherboards.

MICROPROCESSORS (CPU)

Intel Pentium 100 MHz	$929.00
Intel Pentium 66 MHz	$499.00
Intel Pentium 60 MHz	$439.00
Intel 486DX4-100 MHz	$459.00
AMD 486DX4-100 MHz	$319.00
AMD 486DX2-80 MHz	$219.00
Intel 486DX2-66 MHz	$199.00
Intel 486DX-33 MHz	$139.00
Intel 486SX-33 MHz	$95.00
Pentium CPU fan	$13.00
486 CPU fan	$8.00

MEMORY

Simm 1x3 (1mb) 30 pin	$41.00
Simm 1x9 (1mb) 30 pin	$44.00
Simm 4x3 (4mb) 30 pin	$139.00
Simm 1x32 (4mb) 72 pin	$159.00
Simm 2x32 (8mb) 72 pin	$299.00
Simm 4x32 (16mb) 72 pin	$469.00
Simm 8x36 (32mb) 72 pin	$999.00
Simm 16x36 (64mb) 72 pin	$2299.00

FLOPPY DISK DRIVES

Mitsumi 1.2mb (5.25")	$39.00
Mitsumi 1.44mb (3.5")	$29.00
Teac 1.2mb (5.25")	$43.00
Teac 1.44mb (3.5")	$34.00
Teac dual 1.2mb (5.25")/1.44mb (3.5")	$87.00

ADD ON BOARDS AND CONTROLLERS

AT Super IDE IO adapter (dual FDD & HDD, 2S, 1P, 1G)	$13.00
Vesa Local Bus Super IDE & IO	$19.00
PCI IDE adapter	$25.00
PCI SCSI adapter	$69.00
AT IDE w/16550 Hi-Speed IO	$29.00
VLB IDE w/16550 Hi-Speed IO	$43.00
VLB SCSI w/16550 Hi-Speed IO	$119.00
Adaptec AHA-1522K SCSI floppy/hard host adapter kit	$137.00
Adaptec AHA-1542CK SCSI bus master host adapter kit	$230.00
Adaptec AHA-2742TK EISA SCSI bus master host adapter kit	$349.00
Adaptec AHA-2842K EISA SCSI bus master host adapter kit	$239.00
Adaptec AHA-2940 PCI wide SCSI-2 hose adapter kit	$349.00
Adaptec AHA-2940 PCI fast SCSI-2 hose adapter kit	$239.00
Adaptec SCSI all models - card only	call

Please call for pricing on GSI, Promise, Bus Logic, Boca, DTC, Ultrastor, Future Domain, Always, Tekream and Q Logic controllers.

HARD DISK DRIVES

Conner CFS 420A - 420mb IDE	$175.00
Conner CFS 540A - 540mb IDE	$210.00
Conner CFA 850A - 850mb IDE	$286.00
Conner CFA 1080A - 1.08GB IDE	$410.00
Conner CFP 1060S - 1.06GB SCSI	$459.00
Maxtor MX-7540A - 540mb IDE	$199.00
Maxtor MXT-1240S - 1.2GB SCSI	$479.00
Quantum 420mb IDE	$178.00
Quantum 540mb IDE	$215.00
Quantum 540mb SCSI	$239.00
Quantum 730mb IDE	$275.00
Quantum 1080S - 1.08GB SCSI	$529.00
Quantum 2GB SCSI	$989.00
Samsung 420mb IDE	$173.00
Segate 3660A - 540mb IDE	$182.00
Segate 31200A - 1.05GB IDE	$439.00
Segate 31200N - 1.6GB SCSI	$539.00
Segate 12400N - 2.4GB SCSI	$999.00
Western Digital AC2420 - 420mb IDE	$185.00
Western Digital AC2540 - 540mb IDE	$222.00

HARD DISK DRIVES CONT.

Western Digital AC2850 - 850mb IDE	$299.00
Western Digital AC31000 - 1GB IDE	$425.00

Please call for pricing on Digital (DEC), Micropolis, Mini-Stor, and any other unlisted models.

CHASSIS (CASES)

Pac CS-230D desktop case w/200w power supply	$45.00
Pac CS-21 mini tower case w/230w power supply	$39.00
Pac CS-31 mid tower case w/230w power supply	$59.00
Pac CS-41 full tower case w/230w power supply	$79.00
CS-609T mini tower case w/230w power supply	$47.00
Diamond KS-330 mini tower case w/220w power supply	$69.00
Diamond KS-230 mid tower case w/250w power supply	$95.00
Diamond KS-130 full tower case w/250w power supply	$109.00
Diamond KS-730 desktop tower case w/250w power supply	$71.00
API GT151 mini tower case w/230w UL power supply	$69.00
API GT210 mid tower case w/250w UL power supply	$105.00
API GT300 full tower case w/230w UL power supply	$170.00
2nd fan for diamond case	$10.00

VIDEO BOARDS

Trident 9000 VGA w/512K	$34.00
Trident 8900 SVGA w/1mb	$55.00
Trident 9400 VLB SVGA w/1mb	$60.00
Cirrus Logic 5428 VLB SVGA w/1mb	$69.00
S-3 VLB SVGA w/1mb	$79.00
Diamond Stealth 64 VLB w/2mb	$175.00
Diamond Stealth 64 PCI w/2mb	$175.00
Diamond Viper SE VLB w/2mb VRAM	$289.00
Diamond Viper SE PCI w/2mb VRAM	$279.00
Diamond Stealth 64 VLB w/2mb VRAM (expandable to 4mb)	$265.00
Diamond Stealth 64 PCI w/2mb VRAM (expandable to 4mb)	$269.00
ATI Pro Turbo 64 VLB w/2mb DRAM	$179.00
ATI Pro Turbo 64 PCI w/2mb DRAM	$177.00
ATI Pro Turbo 64 VLB w/2mb VRAM	$268.00
ATI Pro Turbo 64 PCI w/2mb VRAM	$270.00
ATI Mac 64 VLB w/4mb VRAM	$465.00
ATI Mac 64 PCI w/4mb VRAM	$459.00

Please call for prices on Matrox, Number Nine, Orchid, Hercules, and any other unlisted models.

MONITORS

Acer 347 14" SVGA-NI (Green)D	$215.00
Acer 562 15" SVGA-NI (Green)D	$315.00
Acer 762 17" SVGA-NI (Green)D	$575.00
CTX 1451ES 14" SVGA-NI	$225.00
CTX 1565GM 15" SVGA-NI (Green)D	$319.00
CTX 1765GM 17" SVGA-NI (Green)D	$575.00
MAG DX-15F 15" SVGA-NI (Green)D	$309.00
MAG DX-17F 17" SVGA-NI (Green)D	$579.00
MAG MX	call
Optiquest 1000S 14" SVGA-NI (Green)	$249.00
Optiquest 2000DS 15" SVGA-NI (Green)D	$339.00
Optiquest 2000DC 15" SVGA-NI (Green)D	$359.00
Optiquest 4000DC 17" SVGA-NI (Green)D	$659.00
Viewsonic 6E 14" SVGA-NI (Green)	$269.00
Viewsonic 15ES 15" SVGA-NI (Green)	$399.00
Viewsonic 15G 15" SVGA-NI (Green)D	$365.00
Viewsonic 15 15" SVGA-NI (Green)D	$385.00
Viewsonic 17G 17" SVGA-NI (Green)D	$689.00
Viewsonic 17 17" SVGA-NI (Green)D	$789.00
Viewsonic 20 20" SVGA-NI (Green)D	$1425.00
Viewsonic 21 21" SVGA-NI (Green)D	$1589.00
KFC 1511 15" SVGA-NI	$279.00
KFC 1507 15" SVGA-NI (Green)D	$309.00

Please call for prices on NEC, Sony, Nanao, Nokia M7 and any other unlisted models

KEYBOARDS

Sycan 101 keys	$15.00
Honeywell 101 keys	$29.00
Keytronic KT-2000	$28.00
Focus 2001 w/ hard dust cover	$32.00
Focus 6000 (soft click)	$25.00
Focus 7000 w/trackball	$39.00
Focus 8000 (calculator, soft click)	$36.00
Focus 9000 (programable calculator)	$48.00
Fujitsu 4700	$38.00
Microsoft Nature Hi-Tech	$89.00

CD-ROM DRIVES

Creative Labs Discovery CD 16 kit	$249.00
Creative Labs Digital School House 16 kit	$259.00
Creative Labs Entertainment CD 16 kit	call
Creative Labs Multimedia Office kit	$515.00

CD-ROM DRIVES CONT.

Funai 2x internal	$98.00
Mitsumi 4x internal IDE	$205.00
NEC 510 3x internal SCSI	$203.00
NEC 4x2 internal SCSI	$389.00
Panasonic 562B internal 2x	$115.00
Plextor 4x internal SCSI	$389.00
Sony 55E 2x internal IDE	$113.00
Toshiba 3501 4x internal SCSI	$289.00
Teac 55A 4x internal IDE	$202.00
4 CD titles	$12.00
14 CD titles	$42.00

Please call for pricing on Texel, Philip, Pioneer, and any other unlisted models.

SOUND CARDS AND SPEAKERS

Creative Labs Pro Edition	$69.00
Creative Labs Value Edition	$89.00
Creative Labs 16 MCE	$129.00
Creative Labs 16 MCD OEM	$89.00
Creative Labs 16 MCD ASP	$165.00
Creative Labs SCSI-2	$149.00
Creative Labs SCSI-2 OEM	$99.00
Creative Labs SCSI-2 ASP	$185.00
Creative Labs Awe 32 ASP and wave MCD	$259.00
Winstom 16 SCSI	$79.00
Mini stereo speakers	$8.00
MS-305 40w speakers	$25.00
MS-405 100w speakers	$42.00
MS-410 120w speakers	$47.00

Please call for prices on ATI, Cardinal, Diamond, Logitech, Roland, Orchid, Turtle Beach sound products.

MODEMS

Harmony 14.4 internal data/fax	$52.00
Smartone 9600/2400 internal data/fax	$31.00
Smartone 14.4 internal data/fax	$79.00
Smartlink 9600/2400 internal data/fax	$32.00
Smartlink 14.4 internal data/fax	$69.00
Smartlink 19.2 internal data/fax	$89.00
Smartlink 14.4 internal data/fax	$65.00
Smartlink 14.4 external data/fax	$89.00
Smartlink 28.8 internal data/fax	$175.00
Smartlink 28.8 external data/fax	$199.00
U.S. Robotics Sportster 14.4 internal data/fax	$98.00
U.S. Robotics Sportster 14.4 external data/fax	$115.00
U.S. Robotics Sportster 28.8 internal data/fax	$209.00
U.S. Robotics Sportster 28.8 external data/fax	$235.00

Please call for pricing on Boca, Hayes, Supra, and Zoom modems.

TAPE BACKUPS

Colorado DJ-20 internal 250mb	$146.00
Colorado DJ-30 internal 350mb	$169.00
Colorado JT-20 external 250 parallel	$279.00
Colorado JT-30 external 350 parallel	$319.00
Colorado AB-11 external adapter kit	$38.00
Colorado KE-09 external drive kit	$75.00
Colorado FC-10 500kb/s - 1mb/s adapter kit	$80.00
Colorado 1GB and 2GB internal and external	call
Conner Tapestor 250 internal	$135.00
Conner Tapestor 420 internal	$175.00
Conner Tapestor 250 external	$269.00

Please call for pricing on DEC, Etabyte, I-Omega, Summite, Tecmar, and Wangtek tape backup systems.

MICE/TRACKBALLS

Qtronix 3 button serial mouse	$8.00
A-4 Tech serial mouse	$9.00
A-4 Tech serial trackball	$24.00
A-4 joystick	$17.00
Logitech Bus Mouseman	$62.00
Logitech PS-2/serial Mouseman	$39.00
Logitech PS-2/serial Trackman	$69.00
Logitech Cyberman 3D	$42.00
Logitech cordless mouse	$85.00
Microsoft serial mouse	$27.00
Microsoft bus mouse	$52.00
Microsoft ballpoint trackball	$49.00

PRINTERS

Please call for pricing on Cannon, Citizen, Epson, Hewlett Packard and Panasonic printers.

ALL PRICES REFLECT A 3% CASH DISCOUNT

DISCOUNTS AVAILABLE FOR DEALERS AND CONSULTANTS
We at West Tech have special discount rates set up for small dealers and volume buyers.

CORPORATE, EDUCATION AND GOVERNMENT PO'S WELCOME
Fax us your PO and we'll ship your order on approval by our financial department. It's that easy!

UNLIMITED TECHNICAL SUPPORT
Sometimes even the experts have questions and at WEST TECH we've got the answers. Minimize downtime and call us whenever you need fast, reliable solutions.

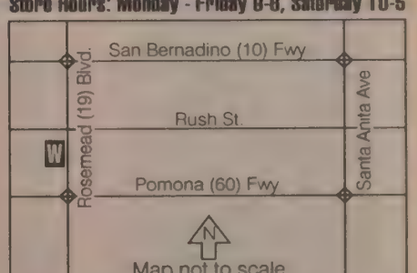
WE GLADLY ACCEPT

VISA | MASTER CARD | AMERICAN EXPRESS | DISCOVER CARD | PERSONAL CHECKS

Terms:

- 30 day money back gaurantee with 15% restocking fee
- All prices are C.O.D. cash
- All returns must be as-new and sent prepaid with RMA number
- One year warranty on parts
- Three years labor waranty
- West Tech is not responsible for typographical errors.

Store Hours: Monday - Friday 8-8, Saturday 10-5



1935 N. Rosmead Blvd., S. El Monte, CA 91733

Phone (818) 279-1356 • Fax (818) 279-2653 • Tech Support (818) 279-2819 • Customer Service (818) 279-2939

Your PC expert

... I have no time,
little money,
and I want quality! ...

486 2X Multimedia

486DX2-66	$1399
486DX-33	$1299

- ☑ INTEL CPU, ZIF socket
- ☑ CPU cooling fan (DX2-66 only)
- ☑ 256K cache
- ☑ Pentium Overdrive (P24T) ready
- ☑ 8 MB RAM (128MB max.)
- ☑ TEAC 1.44 MB floppy drive
- ☑ 540 MB hard drive
- ☑ 32-bit Enchanced IDE HD controller
- ☑ 32-bit SVGA graphic accelerator w/1 MB
- ☑ 14" SVGA NI green monitor, .28dp
- ☑ 2 serial, parallel, & game ports
- ☑ Fujitsu 101 keyboard
- ☑ Mini tower case w/230W
- ☑ Microsoft compatible mouse

Cool

- ● 16-bit Sound blaster compatible card
- ● Double speed (2X) CD-ROM drive
- ● 140W Hi-Fi power speakers

DOS 6.22 & WFW 3.11	add $105
Encyclopedia etc. 6 Titles	$40
MS Encarta 95, Works etc.	$70

Pentium 4X Multimedia

Pentium-90	$2259
Pentium-66	$2059

- ☑ INTEL CPU, ZIF socket
- ☑ CPU cooling fan
- ☑ 256K cache
- ☑ 8 MB RAM (128MB max.)
- ☑ TEAC 1.44 MB floppy drive
- ☑ 730 MB hard drive
- ☑ PCI Enchanced IDE HD controller
- ☑ PCI Stealth 64 or ATI Mach 64 w/1 MB
- ☑ MAG 15" 1280 X 1024 NI monitor, .28dp
- ☑ Digital control, Low radiation (3 yr warranty)
- ☑ 2 serial, parallel, & game ports
- ☑ Fujitsu 101 keyboard
- ☑ Medium tower case w/230W
- ☑ Microsoft compatible mouse

Cool

- ● Sound Blaster 16 sound card
- ● Quad speed (4X) CD-ROM drive
- ● 140W Hi-Fi power speakers

DOS 6.22 & WFW 3.11	add $105
Encyclopedia etc. 6 Titles	$40
MS Encarta 95, Works etc.	$70

Parts

Intel CPU (all model)	Call
4X32-70 16 MB	Call
2X32-70 8 MB	Call
1X32-70 4 MB	Call
Pentium-90/100 MB w/256K	$175
Pentium-66/80 MB w/256K	$156
Intel Pentium-90/100 MB w/256K (Built-in enchanced IDE & I/O)	$336
486 VLB MB w/256K, 72 pin	$100
486 VLB MB w/256K, 30+72 pin	$96
Conner 1.275 GB IDE HD	$429
Conner 540 MB IDE HD	$199
Conner 420 MB IDE HD	$179
Conner 1.08 MB SCSI-2 HD	Call
Quantum 730 MB HD	$260
Quantum 540 MB HD	$199
Other Brand name HD	Call
17" MAG DX-17F, .26 NI	$679
15" MAG DX-15F, .29 NI	$319
14" Proten, .28 NI	$209
PCI Stealth 64 2MB VRAM	$299
PCI Stealth 64 2MB DRAM	$169
PCI Stealth 64 1 MB DRAM	$129
PCI ATI Mach 64 2MB VRAM	$295
PCI ATI Mach 64 2MB DRAM	$185
PCI ATI Mach 64 1MB DRAM	$135
VLB Cirrus 5428 1MB DRAM	$76
Conner 420MB T/D w/tape	$179
Conner 250MB T/D w/tape	$139
Colorado 350MB tape drive	$169
Colorado 250MB tape drive	$146
US Robotic 28.8 Int V.34 FAX	$219
US Robotic 14.4 Int Fax/Modem	$109
Monterey 14.4 Int Fax/Modem	$69
Teac 4X CD-ROM	$209
Mitsumi 4X IDE CD-ROM	$209
Toshiba 4X SCSI CD-ROM	$295
Sony 2X IDE CD-ROM	$115
Panasonic 2X CD-ROM	$120
Sound Blaster 16 SCSI-2	$109
Sound Blaster 16	$79
Sound Easy Pro 16 MCD	$69
140W Hi-Fi Power Speakers	$66
40W Hi-Fi Power Speakers	$30
Mini Speakers	$9

486 VESA

486DX2-66	$1059
486DX-33	$959

- ☑ INTEL CPU, ZIF socket
- ☑ CPU cooling fan (for DX2-66 only)
- ☑ 256K cache
- ☑ Pentium Overdrive (P24T) ready
- ☑ 4 MB RAM (128MB max.)
- ☑ TEAC 1.44 MB floppy drive
- ☑ 540 MB hard drive
- ☑ 32-bit Enchanced IDE HD controller
- ☑ 32-bit SVGA graphic accelerator w/1 MB
- ☑ 14" SVGA NI green monitor, .28dp
- ☑ 2 serial, parallel, & game ports
- ☑ Fujitsu 101 keyboard
- ☑ Mini tower case w/230W
- ☑ Microsoft compatible mouse

DOS 6.22 & WFW 3.11 add $105

Pentium PCI

Pentium-90	$919
Pentium-66	$879

- ☑ INTEL CPU, ZIF socket
- ☑ CPU cooling fan
- ☑ 256K cache
- ☑ 8 MB RAM (128MB max.)
- ☑ TEAC 1.44 MB floppy drive
- ☑ 730 MB hard drive
- ☑ PCI Enchanced IDE HD controller
- ☑ PCI Stealth 64 or ATI Mach 64 w/1 MB
- ☑ MAG 15" 1280 X 1024 NI monitor, .28dp
- ☑ Digital control, Low radiation (3 yr warranty)
- ☑ 2 serial, parallel, & game ports
- ☑ Fujitsu 101 keyboard
- ☑ Medium tower case w/230W
- ☑ Microsoft compatible mouse

DOS 6.22 & WFW 3.11 add $105

Multimedia Upgrade Kit

Quad Speed

- * Teac 4X CD
- * Sound Blaster 16
- * 40W Hi-Fi speakers

Only $299

- * Toshiba 4X CD
- * SB 16 SCSI-2
- * 40W Hi-Fi speakers

Only $419

TCC

1154 E. Colorado Blvd.
Pasadena, CA 91106
(818) 795-6112
M-F 9-5:30

Terms & Condition

All name brand & quality components
All systems are fully tested & burned-in for 72 hours
Free lifetime technical support
Friendly customer service

One year parts & two year labor warranty

30 Days Money Back Guarantee
with 15% restocking fee

Prices & specifications subject to change without notice.
Not responsible for typographical errors.

SMALL OFFICE/HOME OFFICE • BY BIRRELL WALSH

Space And Beauty

Optimizing The Home Office

People ask me whether hardware or software is more important in their home office. The answer is "neither," of course. What is most important is you, the user; what makes you comfortable and productive at home is always the key business issue. I have found that the kind of space I work in determines how much I can do, and how well.

This is more than neatness. Articles about workspace tidiness tend to preach to the converted, making perfect sense to people who are naturally tidy. These folks always pick up after themselves. They wash their coffee cups. They put quarterly reports in file folders, put the file folders away, and (bless them!) have organized file cabinets to put them in.

But I'm Not A Tidy Sort...

Those of us who really need this information are *not* naturally tidy. In its native state, my desk is a heap. It awaits future researchers (I try to keep a positive outlook—"I am not a mess-maker; I am a resource for archeologists.")

But I am also a lazy man. Over the years I've found that my chaotic space was making it hard for me to get anything done. The easy way, in fact, was to create an area that supported work.

"Space and Beauty" has become my slogan. The object is to make a space with room to work, and make it so attractive that we are drawn into it.

A Room Of One's Own...

When you create an office in your own home, the temptation is to "just use the kitchen table." It doesn't work. When you work in someone else's office, they provide a dedicated workspace. When you rent an office and furnish it for business, you also acquire the dedication.

When you work at home, it is always too easy to slide from "work" mode to "home" mode. The problem turns out not to be one of hardware or software, but of space. To use your equipment well at home, you need to create and defend "A Room of Your Own."

You can do this by separating. This is the same process by which space is purified for a religious observance. One dedicates the space by removing everything other than what belongs there. When Passover time comes in an observant Jewish household, family members search for yeast-raised bread; and it is all removed. Thus the house is made clean for Pesach. When you are building a home office, the first object is to remove things that will be in the way.

Are you a book or television critic? If not, the television and entertaining books do not belong in the office. The mail does not go in the office (unless it is business mail). Birthday gifts are not hidden there. The object is to make a space that will support your work, and that will discourage distractions.

There is a simple test, really. Look at everything in the workspace and ask, "Does this directly support doing the job?" If not, it goes.

An office dedicated to work has an additional benefit: what is not in the office is not work. The separate workspace serves not only your professional life, but your family life as well. You can leave your home office, close the door, and be at home in the rest of your house.

The Compromises

The ideal is to have a space that is entirely yours. The best room is a small mountain cabin, with no neighbors for several miles.

"Space and Beauty" has become my slogan. The object is to make a space with room to work, and make it so attractive that we are drawn into it.

No spouse, no pets, no children, and a phone that only makes outgoing calls. The goal is that you will be alone with your work.

The average home office is a webwork of compromises. There is no room available in the house, so you use half of a room and try to ignore the goings-on in the other half. The cat wants contact. When you won't let her sit on your lap, she sits on the printer and sheds into it. Children know that a parent at home is at their service.

So how do you optimize your chances of making a space where you can get some work done? Here are some rules of thumb: If you can get a room with a door that closes, take it! If your job is worth doing at home, it is worth a dedicated room. A room wholly dedicated to income-producing work will be a much more defensible deduction at tax time.

If you know how you get distracted, choose your office to avoid those distractions. I have found that sounds will always catch my attention. In a small house, it is hard to avoid outside noises, but I have my workspace in the quietest part of the house. A person who follows their nose to any good smell should try to move their office away from the kitchen.

Placing Things In The Office

If you follow all these suggestions, you will have a very bare room. Everything that belongs elsewhere has been removed, down to the last protesting cat. Now you want to make an actively work-supporting environment.

What things *do* belong in the workspace, and where should those things be? "Ease and Beauty" would be my answer. The object is to make an environment that is attractive, so that you want to go into it; and easy to work in. Ten years of writing at home has given me these ideas:

HIGH PERFORMANCE ------

"IT'S THE ONLY WAY TO COMPUTE"

" GIGABYTE STORAGE AT MEGABYTE PRICES "

ASK ABOUT OUR SAME DAY DELIVERY

MICROPOLIS ----

MC 4221 2.1GB SCSI-2 3.5" 8.5ms $1129.
MC 1936 3.1GB SCSI-2 5.25" 11ms $1599.
MC 3243 4.3GB SCSI-2 3 .5" 8.5ms $2095.
MC 1991 9.0GB SCSI-2 5.25" 11ms $3349.

MICROPOLIS AV SERIES

MC 4221AV 2.1GB AUDIO/VIDEO $1259
MC 1936AV 3.1GB AUDIO/VIDEO $1699
MC 3243AV 4.3GB AUDIO/VIDEO $3499

SEAGATE -------

ST31200N 1.2GB SCSI-2 3.5" 9ms $549.
ST12400N 2.1GB SCSI-2 3.5" 9ms $995.
ST15230N 4.3GB SCSI-2 3.5" 9ms $1895.
ST410800N 9.0GB SCSI-2 5.25" $3395.

HIGH PERFORMANCE 7200RPMS

SEAGATE BARRACUDA 'S

ST32550N 2.1GB SCSI 3.5" 8.5 ms $1195.
ST15150N 4.3GB SCSI 3.5" 8.5ms $2295.

QUANTUM -------

1080S 1.0GB SCSI-2 3.5" 9ms $569.
2100S 2.1GB SCSI-2 3.5" 9ms $949.

ATLAS & GRAND PRIX 7200 RPMS

32150AL 2.1GB SCSI 3.5" 8ms $1199.
34301GP 4.3GB SCSI 3.5" 8ms $2099.

CONNER ----------

CFP1060S 1.0GB SCSI-2 3.5" 9ms $559.
CFP2105S 2.0GB SCSI-2 3.5"9ms $959.
CFP4207S 4.2GB SCSI-2 3.5" 9ms $1895

CALL FOR CONNER
TAPE BACKUP PRICING

!!!!!NOTEBOOK SPECIALS!!!!!

MAC/ POWERBOOK 540C 4MB 320HD $3899
TOSHIBA T4800CT 486DX4-75 8MB 500HD $4299.

MDW TECHNOLOGIES

1-800-644-7484

CORPORATE & GOVERNMENT PO'S ACCEPTED
NO SURCHARGE FOR CREDIT CARDS
ALL RETURNS NEED AUTHORIZATION NUMBER
PRICES SUJECT TO CHANGE WITHOUT NOTICE.

MasterCard VISA

Pentium 60MHz $1545
Pentium 90MHz $1795

- Intel Pentium 60/90MHz CPU w/cooling fan
- High Quality Pentium PCI ZIF MB 256K Cache
- 8MB RAM
- 420MB Hard Disk
- 1.44MB FDD
- PCI Cirrus Logic 5434 SVGA 1MB (exp. 2MB)
- PCI IDE Hard Drive Card
- 2 Serial/1 Parallel
- 14" SVGA 0.28 Non-Interlaced Color Monitor
- Mini Tower 230W UL P/S
- Mitsumi Mouse
- 101 "OKI" Japanese Keyboard

486DX4-100MHz $1289
486DX2-66MHz $1049

- High Quality LOCAL BUS MB 256K Cache
- 4MB RAM • 420MB Hard Disk • 1.44MB FDD
- 32 Bit Local Bus Accelerator SVGA 1MB
- 32 Bit Local Bus HD/FD/2S/1P/1G Card
- 14" SVGA 0.28 N.I. Color Monitor • Mitsumi Mouse
- Mid Tower 230W UL P/S • 101 OKI Keyboard

Upgrade To Pentium from 286/386/486

Pentium 60MHz $665
Pentium 66MHz $698
Pentium 90MHz $895

- Intel Pentium 60/66/90MHz CPU w/cooling fan
- High Quality Pentium PCI ZIF MB 256K Cache
- Labor Included *Expert in PC Upgrade/Service

486DX-40MHz $409
486DX2-66MHz $479

- 486DX CPU • 4MB RAM • 256K Cache
- High Quality Local Bus MB • Labor Included

MONTHLY SPECIAL
486DX2-80MHz $479

- 486DX2-80MHz CPU • 4MB RAM • Labor Included

STORE MANAGEMENT SOFTWARE

Inventory Control, Invoice Billing..... SPECIAL $89
Accounts Payable, Accounts Receivable, Purchase Order, Customer/Vendor Data, Address Label, Stock/Price List, Reports, Daily/Monthly Profit Analysis, Plus More!
(Reg. $129. Multi-User Version Available)

POINT-OF-SALE SOFTWARE/HARDWARE

Point-Of-Sale Quick Sales..... SPECIAL $199
Bar Code Reader & Cash Drawer Interface, PLUS all features of "Store Management" (Reg. $249 Multi-User Version Available)

< BAR CODE SOFTWARE CALL >
< BAR CODE HARDWARE CALL >

CALL FOR FREE DEMO DISK !

PEAKTRON COMPUTER, INC.

CALL FOR OTHER SYSTEM CONFIGURATIONS AND ACCESSORY PRICES!
WESTMINSTER ** TEL. (714) 893-6224 • 5771-5773 Westminster Blvd., Westminster, CA 92683
CYPRESS ** (714) 527-8218 * 9187 Valley View St., CA 90630 (Cellular & Pager Service Available)
* All prices reflect cash discount. * Price & Specifications subject to change w/out notice. * Tradenames are properties of their respective owners. *

•Your primary tool should be straight ahead of you. For many of us, that is the computer. The computer should be straight ahead, then, and the keyboard should be comfortably placed. Is what you need in front of you? If not, rearrange until it is. The test is simple: When you sit down, is it so easy to start working that you just do?

•Resources should be beside you. Do you need certain paper files every few minutes? They should be right beside you, so you can reach out and grab them without looking. Disks you use daily should be there. Your coffee cup and your telephone should be within reach. They are to the side, because they are resources rather than your task itself, but accessible.

•If your primary tool is straight ahead, and resources are to your left and right, what lies at those 45-degree angles where we stare in search of inspiration? I find that "Inspiration" is the answer: When we need to look away from our work and grab a moment's nourishment for the soul, it should be available. If it is not, we will get up and abandon what we are doing. Put the pictures of the family here, the mountain-flowers poster or the photograph of Strongheart. One Buddhist writer I know keeps a small shrine there.

These rule of thumb for home office layout—work straight ahead, resources beside you, inspiration at 45 degrees—create a workspace that encourages you at your task. When you sit down, all you see is the job to do and inspiration to do it. Everything you need is at hand.

Containers As A Way Of Thinking

Having the "filing by piling" temperament, I find it difficult to keep things ordered. Yet if anything saves time and avoids annoyance, it is a filing system that serves your needs.

This does not mean a filing system that would satisfy your most compulsive friend. It means that things are easy to find when you want them, and out of the way when you don't want them.

This is how I finally got my desk cleared off. Each major project has its own files. If I find that I don't have a file for a new project, I create one immediately. Then useful information gets saved instead of discarded, and I can find it later. Because much of my work deals with books, I have a "current" bookrack right beside me. The books I am reviewing, or using as references for articles,

PC SERVICE

WHY BUY FROM US?

WE BUILD TO YOUR SPECS!

We Service What We Sell!
We Won't Rest 'Til It's Right!
We Support Our Customers!

MULTIMEDIA CORNER

CD-ROM DRIVES

SONY 55E (2X IDE)
250ms access, 300+KB output $121
NEC 3XE (3X SCSI 2 External)
195ms access, 450+KB output, multi-session $269
MITSUMI FX400 (4X IDE)
250ms access, 700 KB output, multi-session $255
TOSHIBA XM3501B (4X SCSI 2)
155ms access, 600KB output, multi-session $319

CD-ROM BUNDLES

SONY 55E 2X CD-ROM Bundle with:
- Sound Card
- Speakers
- CD Titles

$199 COMPLETE

NEC 2X CD-ROM Bundle with:
- Fast, 280 ms, SCSI 2, multi-session
- Media Vision SCSI (16-bit) Sound Card
- 4 Watt Amplified Speakers
- Compton's Interactive Encyclopedia

$259 COMPLETE

TOSHIBA 4X CD-ROM Bundle with:
- Fast, 155 ms, SCSI 2, multi-session
- Media Vision SCSI (16-bit) Sound Card
- Labtec/Koss Speakers
- Six popular CD-ROM titles

$434 COMPLETE

SPECIALS

CD Disc Caddy	$5.99
CD-ROM Assortment from	$6.99
MultiMedia Speaker Set	$8.99
MultiMedia Headphones	$8.99
MultiMedia Microphone	$9.99
Simple Solutions Software	$9.95
80 Watt Speakers (Laser Station)	$49.95
ZOLTRIX 14.4 Internal Fax/Modem	$74.00
Media Vision 16 (SCSI) Sound Card	$97.00

486DX2-66

VESA LOCAL BUS

- 486 DX2-66 Vesa LB, 256K Cache
- 4MB RAM
- 1.44MB Floppy Drive
- 420MB Hard Drive
- IDE Vesa LB Controller
- SVGA Vesa LB 1MB
- 14" SVGA 1024x768 Color .28 Monitor N.I.
- 101 Keyboard
- Mini Tower Case
- Serial Mouse
- CPU Cooling Fan

$1099 intel inside

486DX2-66 PCI

PCI/ VLB

- 486DX2-66 PCI 256K Cache Enhanced PCI 32 IDE
- 8MB RAM
- 1.44 MB Floppy Drive
- 1GB IDE Hard Drive
- Paradise Bali 32 PCI Video Card, 1MB (Exp. to 2MB)
- 15" SVGA Digital, .28 Flat Monitor, 1280x1024 N.I.
- 101 Keyboard
- Medium Tower Case
- Serial Mouse
- CPU Cooling Fan

$1669 intel inside

Pentium-90

PCI/ VLB

- Intel Pentium 90MHz
- P90 Motherboard w/256K Cache & PCI, VLB, ISA slots
- 8 MB RAM
- 15" SVGA Digital, .28 Flat Monitor, 1280 x 1024 N.I.
- 420 MB Hard Drive
- PCI IDE Controller
- Diamond Stealth 64 PCI Video Card w/ 2 MB
- 1.44 MB Floppy drives
- Medium Tower Case
- 101 Keyboard
- Serial Mouse
- CPU Cooling Fan

$2099 intel inside

NOTEBOOKS

486DX2-50 D/S Color

- 4MB RAM
- 200 MB Hard Drive
- PCMCIA
- 1 MB Accelerated Video

$1495
While Supply Lasts

UPGRADES

UPGRADE YOUR 286/386 COMPUTER SYSTEM

MOTHERBOARDS & MEMORY

486DX VLB Motherboard
DX-4 Ready, ZIFF socket,
Accepts 72-Pin Simm Memory $109

486 DX PCI Motherboard
DX-4 Ready, PCI IDE on-board,
256 K Cache, bundled with: PARADISE
BALI 32 PCI,1 MB Video Card $235

486 DX2-66 MHz w/256K Cache, w/4MB RAM, VLB
Intel 486 DX2/66 CPU $419

HARD DISKS & TAPE

420MB DRIVE	$189
560MB DRIVE	$205
1GB (IDE) DRIVE	$439
Conner 250 TAPE KIT w/cart	$149
Conner 420 TAPE KIT w/cart	$189

CARDS

IDE with I/O (ISA)	$13
IDE with I/O (VLB)	$27
SVGA S3, VLB, 1MB (to 2MB)	$94

VISIONMASTER™
IDEK Iiyama

- 17" FST
- Digital
- 3 yr. Warranty
- .26 Dot Pitch
- 1600x1280

$779 IN STOCK!
While Supply Lasts

FACTORY AUTHORIZED REPAIR ON MOST BRANDS

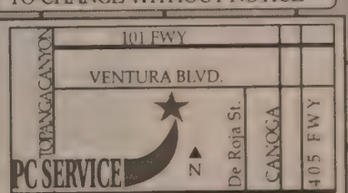
PRICES AND AVAILABILITY SUBJECT TO CHANGE WITHOUT NOTICE

PC SERVICE

818-887-0040
818-887-1470 (Fax)

21600 Ventura Blvd. • Woodland Hills CA 91364

Trademarks are property of their respective owners



are there. When I finish my project, I empty the "current" bookrack immediately.

Each day, I look at everything that has arrived. Some things go immediately into the most useful of all files, the wastebasket. Others can go into known folders: The letter responding to my inquiry goes with the inquiry. New information on current projects may go into the "current" bookrack. Software that arrives for review goes into a "to be considered" basket under the desk.

Look at everything in the workspace and ask, "Does this directly support doing the job?" If not, it goes.

Some things just don't seem to fit into any category, but I am not certain I should discard them. I learned from the wise advice of Pierre Roche de Coppens and Jacques Peze (*The Art of Joyful Living*, the book is called; it is useful for anyone who needs to direct their own life without supervision) that any well-organized office has an "aging basket." Anything whose category is not immediately obvious can go into this basket. Once a week, once a month, or when faced by a writer's block, you can look through the aging basket as if its contents were incoming mail. Some things will immediately go in the trash, some will get files of their own, and a few will return for another round of composting.

To Work In Beauty

In building a space for work, it is easy to get in a "just business" mood that creates an overly severe office. You will find yourself avoiding this office unless you are already in the mood for work.

I have found that simple beauty in the office furniture is key in motivating me to work every day. I learned it from my wife, who has always made her workspaces beautiful. I might be satisfied with a plastic in-box, but she would choose a dark woven basket. She would always save up to buy an attractive filing cabinet. Her paper clips went into small Chinese enamelware cups.

By making her office beautiful, she drew herself into it and supported herself while she was there. Finally I began to imitate her, and with her help learned to make everything in my workspace as

Free *Authorized* Novell Training

Novell Authorized Education Center

New Horizons Computer Learning Center is the ***only*** Novell Authorized Education Center (NAEC) in the Inland Empire. When you enroll in New Horizons' Novell CNE training program, you'll receive Novell's *MS-DOS for NetWare Users* and *Microcomputer Concepts for NetWare Users* course free! New Horizons is accepting enrollments now.

When you register for New Horizons' CNE program, you get all this:

- Free 2-user copy of NetWare. (Included in 508 course student kit.)
- Free Novell Certification Assessment Tests.
- Free CNE Test Review Course.
- Novell Authorized Courseware.
- Classes taught by Certified Novell Instructors (CNIs).
- Hands-on computer usage. One computer per student.
- Convenient hours and convenient locations.

Call Now and Get Started in Your New Career!
(909) 369-9000, ext.128
(800) 778-6682, ext. 128

New Horizons COMPUTER LEARNING CENTER

New Horizons Computer Learning Center
4371 Latham Street, Suite 101
Riverside, CA 92501-1731

NOVELL SOFTWARE

NetWare 3.12 5/10 User	535. /1,179.
NetWare 3.12 100/250 User	2,675./Call
NetWare 4.1 5/10 User	599./1,279.
NetWare 4.1 25/50 User	1,859./2,279.
NetWare 4.1 100/250 User	2,859./Call

ARTISOFT SOFTWARE

Lantastic 6.0 5/10 User	139./249.
Lantastic 6.0 25/50 User	449./889.

Call us for all your LAN Inquiries

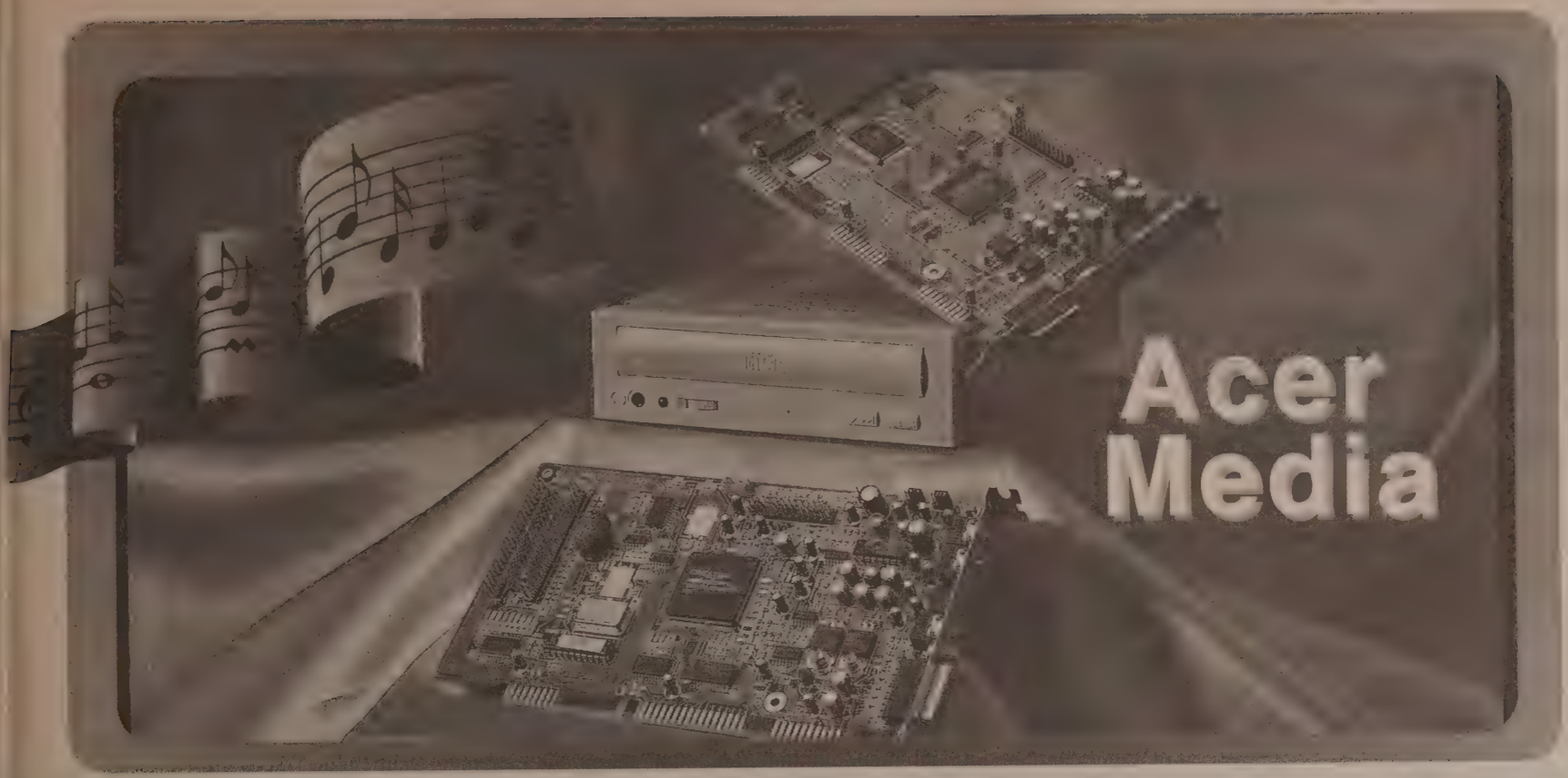
BRAND NAME ETHERNET CARDS
10BASE-T (QTY 5+)
3Com, SMC, Intel.....79.

EnTech
714-589-0164

Serving America's Most Endangered Children
National Headquarters
408-971-4VCA
P.O. Box 909 • Los Gatos, CA 95031-0909
1407 Parkmoor Avenue, Suite 200 • San Jose, CA 95126
HAVE YOU SEEN THIS CHILD?
If so, please call!
800-VANISHED
Sightings ONLY

Ortez, Charmaine Sarah Mae
Date of Birth: 08-20-77
Date Missing: 03-12-94
Missing From: San Jose, CA
Brown Hair & Brown Eyes
Missing Type: Runaway

Vanished Children's Alliance
OUR CHILDREN, OUR FUTURE



The Industry Source Means Value

The lion is coming to you.

Now, Acer also produces multimedia kits. Just like Acer Computer Systems, the new products will offer you the best quality that money can buy. Your satisfaction is our guarantee.

The AcerCD 625 series is a double speed CD-Rom drive. With its seek time less than 300ms and data transfer rate above 300KB/sec, such high performances easily exceed the requirements of most multimedia PC standards.

And with our sound cards, AcerMagic S20 and AcerMagic S30, you will experience the true CD-quality stereo sound from your computer. They are compatible with all major sound standards and complete with double speed multi-session CD-Rom interface.

AcerMagic S30

- 100% Sound Blaster Compatible
- Wave Table Synthesis Support
- Easy Installation
- User-friendly Music Center Software
- MCD + IDE Control
- Creative Lab Chip Set

AcerMagic S20

- Wave Table Synthesis Support
- Easy Installation
- User-friendly Music Center Software
- MCD + IDE Control
- Opti 929 Chip Set

AcerCD 625/625A

- Double Speed, E-IDE/TAPI Interface
- Seek Time Less Than 300 ms
- Data Transfer Rate 300 KB/sec
- Power Saving Feature

Special Offers

Acer CD-ROM	**$ 96**
S20 Sound Card	**$ 52**
S30 + Acer CD-ROM	**$156**
S30 + Microsoft Encarta 95' Encyclopedia	**$ 89**
S30 + Win-Win2 CD Pack	**$ 89**

Acer ISO 9001 AcerMagic

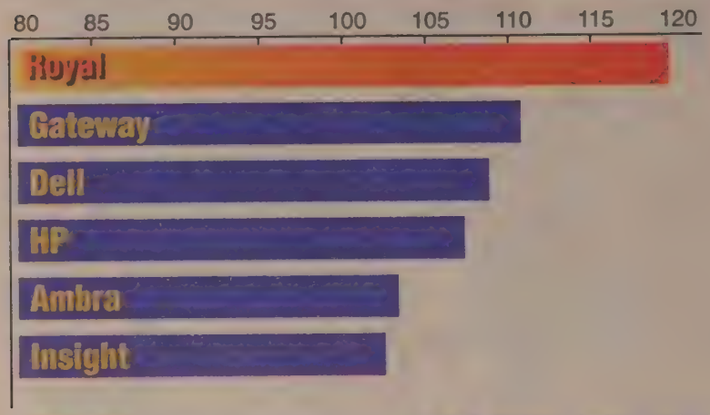
Sales Rep. Needed:
2-Year Experience Required
Salary + Commission
Please Contact Personnel Department

IET International Electronic Technology, Inc.

Acer Authorized Distributor

428 Cloverleaf, Baldwin Park, CA 91706 **TEL : (818) 336-1003 FAX: (818) 330-0052**

Greater Performance and Features



PC MAGAZINE

Sept. 27, 1994

"...This combination should satisfy most users–especially those who need to run high-end Windows graphics software..."

Royal Media Voice-Powered PCI

- **8MB** RAM, upgr. to 128MB
- 256K write-back cache
- **730MB** Enhanced IDE HD
- **PCI Enhanced IDE** controller
- **15" KFC digital flatscreen,** low radiation, 1280 x 1024 - ***Byte "Best Value" Award!***
- **ATI mach64 PCI 2MB RAM - *PC Magazine Editor's Choice***
- **4X CD-ROM drive 600KB**/sec
- **Orchid Soundwave Pro 32, Digital Signal Processing 32-voices** sound card, 2 speakers
- Voice Recognition **software and mic.**
- **14 Multimedia CD titles**
- 1.44MB & 1.2MB FDD, Hi-res mouse
- 2S-1P-1G ports, 101 enh. keyboard

i486DX4-75 .....*$1895*

Pentium™-75 .....*$2145*

Pentium™-90 .....*$2395*

Pentium™-100 .....*$2595*

TOP Rated Performance

PC Magazine rates Royal tops in performance (September 27, 1994). Once again, our lead in new technology puts us ahead of the game. Ahead of Gateway. Ahead of AST. Ahead of Hewlett Packard. Ahead of Dell, Micron, Ambra, and a host of others.

So why bother with last year's stuff when you can have the latest? At Royal, we bring you the latest technology at the most affordable prices, month after month, thereby ensuring your long-term satisfaction. Check our specifications against the other top-tier companies. You'll find us to be strong contenders, with the latest Enhanced IDE and Wide SCSI hard drives, a no-skimp 512K external cache standard, the latest 64-bit video, 4X CD-ROMs, respected name brand sound cards, voice recognition, and award-winning monitors. Give a friendly sales rep a call, and let us outfit you with the best of the latest.

NEW! 4X CD-ROM and

Media Master 4X 16MB RAM/730HD PCI

- **16MB** RAM, upgr. to 128MB
- 256K fast write-back cache
- **850MB** Enhanced IDE IO
- **PCI Enhanced IDE** controller
- **15" MAG digital flatscreen,** low radiation, 1280 x 1024
- **ATI mach64 PCI 2MB RAM - *PC Magazine Editor's Choice***
- **4X CD ROM** drive **600KB**/sec
- Voice recognition **software & mic.**
- **Sound Blaster AWE 32, 14 CD titles**
- 7 bay tower, enhanced 101 keyboard
- MS DOS & Windows for Workgroups
- 1.44MB FDD, Hi-res mouse, 1P-2S-1G

i486DX4-75 .....*$2245*

Pentium™-75 .....*$2495*

Pentium™-90 .....*$2745*

Pentium™-100 .....*$2945* ✔

✔ or lease for $118/mo. (oac)

17" flatscreen upgrade.....add $325

32MB upgrade .....add $395

Lifetime Labor Warranty
Lifetime Tech Support
One Year Parts Warranty

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Prices reflect with 3% cash discount

The Intel Inside Logo is a registered trademark of Intel Corporation.

FAST 64-bit Video

Zip through screen redraws with champion speeds. The amazing new ATI mach64 video 2MB RAM card, with ATI's newest 64-bit processor, achieves up to an incredible 42 WinMarks or more in Windows 3.11! (Winbench ver4.0)

TRUE Sound 16-bit DSP

PC Magazine recently called it "the perfect sound card" for today's PC. Compatibility with all major sound standards, speech recognition, digital signal processing (DSP) for high fidelity sound at up to 20 million instructions per second, and true 16-bit record and playback. Plus MIDI, "special effects" like Q-Sound ("surround sound") and reverb, for audio realism so surprising you'll call it "True Sound".

4 PCI Slots

Whereas most PC makers give you only 2 or 3 PCI slots on their motherboards, Royal gives you 4 PCI slots. That means you'll have 2 open 32-bit PCI slots for future uses, like networking, additional controllers, and other future high-end PCI cards. And Royal's roomy cases means many open slots and bays for add-on cards and drives of all kinds!

FACT FILE

Royal Media Master IV

SUITABILITY TO TASK	
Windows applications	EXCELLENT
DOS applications	GOOD
Expandability	EXCELLENT

Ratings based on PC Magazine's "Pentium Powerhouses" review of forty 90MHz Pentium systems.

Sept. 27, 1994

4XCD-ROM Drive

With quadruple the processing power, 4X CD-ROM drives give you fast data transfer rates– up to 600KB/sec– for even-running, full motion video without "the shakes." Quadspeed CD-ROMs are nearly twice as fast as a triple-speed CD-ROMs.

MultiMedia CD Bundle

Royal bundles 14 sound- and action-packed CDs for your personal enjoyment. Includes games, entertainment, presentation software, and complete multimedia encyclopedia.

Voice Recognition System

- *Hardware, mic & software included*
- *Runs in memory, under applications*
- *Frees hands for typing*

intel inside

ROYAL TRUE SOUND!

Royal Media III PCI, 4X-CD 64-bit Video

- **8MB** RAM, upgr. to 128MB
- **256K fast secondary cache**
- **730MB** Enhanced IDE HD
- **PCI Enhanced IDE** controller
- **15" SVGA NI** flatscreen monitor, 1280
- **4X CD ROM** drive **600KB/sec CD deluxe titles**
- **Orchid Gamewave 32 sound card,** Digital Signal Processing, 2 speakers
- 7 bay tower, enhanced 101 keyboard
- Hi-res mouse, 1P-2S-1G, 1.44MB FDD

i486DX4-75	$1645
Pentium™-75	$1895
Pentium™-90	$2145
Pentium™-100	$2345

Orchid Soundwave Voice ....add $145
ATI mach64 2MB .....add $125

Media Express PCI, 2X-CD, DSP Sound

- **8MB** RAM, **upgradable**
- 256K fast write-back cache
- **540MB** IDE PCI HD Controller
- **15" SVGA NI** flatscreen monitor, 1280
- **Royal 64 bit video PCI accelerator,** 1MB RAM **(2MB** upgradable)
- **Double-spin CD ROM,** Photo CD compatible, 300 KB/sec
- 16 bit Sound Blaster Pro compatible sound card, 2 speakers, 4 CD titles
- 1.44MB 3.5" FDD
- 101 Key enh. keyboard
- Choice of desktop or mini tower
- Hi-res mouse, 1P-2S-1G

i486DX4-75	$1545
Pentium™-75	$1745
Pentium™-90	$1995

14 CD titles upgrade .....add $65
Orchid Gamewave DSP sound....add $45
1.2 Floppy Disk, 5 1/4" .....add $45
CD ROM (4X).....add $95

Designer Pro-17 PCI Professional

- **16MB** RAM, upgr. to 128MB
- 256K cache, upgradable to 512KB
- **850MB** Enhanced IDE HD
- **Enhanced IDE** PCI HD Controller
- **Award winning 17" MAG Digital Flatscreen** - Energy Star
- **ATI mach64 PCI 2MB** RAM, *PC Magazine Editor's Choice*
- **Double-spin CD ROM**
- 1.44MB 3.5" floppy disk drive
- 101 Key enhanced keyboard
- 7 bay tower, dual fans
- MS DOS & Windows for Workgroups
- Hi-res mouse, 2S-1P-1G

i486DX4-75	$2095
Pentium™-75	$2345
Pentium™-90	$2595
Pentium™-100	$2795

Upgrade to Nanao 17" flexscan .....add $395
4X CD ROM .....add $95

Designer Pro-15 PCI

- **8MB** RAM, upgr. to 128MB
- 256K fast secondary cache
- **730MB** Enhanced IDE HD
- Enhanced IDE PCI HD controller
- **15" low radiation flatscreen,** 1280
- **Royal 64 bit video** PCI accelerator, 1MB RAM (**2MB** upgradable), 1280
- 1.44MB 3.5" floppy disk drive
- 101 key enhanced keyboard
- 7 bay tower dual fans
- 2 Serial, 1 parallel, 1 game port
- High resolution serial mouse

i486DX4-75	$1345
Pentium™-75	$1595
Pentium-90	$1845
Pentium-100	$2045

17" flatscreen upgrade.....add $365
CD ROM (2X) .....add $135

2 LOCATIONS TO SERVE YOU:

Corporate P.O. Accepted! *To order or for more information, please call:*

Royal Electronics
1208 John Reed Court, Industry, CA 91745
818.855.5077
Fax Orders 818.330.2717

Alpha Computer
10353 Balboa Blvd., Granada Hills, CA 91344
818.831.5585

Small Office/Home Office *continued...*

beautiful as I can. There are flowers from the garden three seasons a year, and I can look into them for a minute's refreshment when no idea will come. The pencils are in a cylindrical basket of a rich warm color. I admire it each time I reach for a pen.

This is not an invitation to spend every penny on the home office. It is instead an invitation always to consider beauty when buying or building something for your own workspace.

Space And Beauty, Mediated By Ease

So ten years of home-office keeping have given me these lessons:

Although I began working on the kitchen table, I found that I needed a space whose only purpose was my work. I needed not only to have the space, but to defend it against well-intentioned encroachment. There is a cat draped across the monitor at this moment, but there is no reasoning with cats. She has moved herself into the inspiration category. Everything extraneous I remove. The space is dedicated to work.

Despite a natural proclivity for stacking-to-the-sky, I have found that I needed to create a storage system. It is "filing without obsession." What I need is nearby, what is less important is far away. Anything that comes on my desk ends up in some sort of container, even if it is the "aging basket" for the stuff that I cannot assign at this time.

The object is to make things easy. Whatever tidiness arises is a by-product of my laziness.

Finally, I have found that beauty is always a good investment in the office. The attractive desk draws you to it. The good-looking file cabinet not only impresses the visitor, it helps remind you that your work at home is a well-ordered part of a sensible and attractive life. We do not live just to work, but for beauty. We keep beauty around us, to remind us why we choose to work at home.

The Small Office/Home Office column exists to serve all those who have their business in their own home. Please let us know what you would like to hear about, and share your tips and your stories of triumph or frustration. You can reach me online at *birrell@well.sf.ca.us.* ■

Copyright © 1995 by Birrell Walsh. All rights reserved.

Check Out our new shipment of AST and Compaq

ACP

Over 30,000 new software titles at up to 80% off

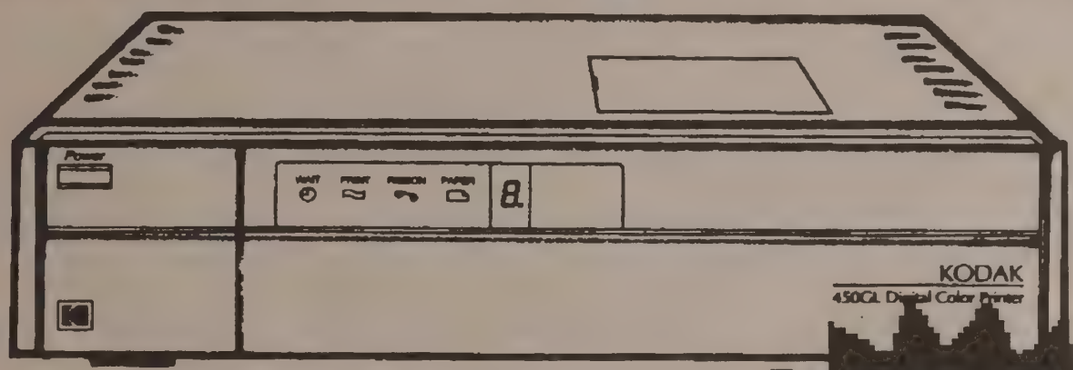
Special Purchase

WAS $1749.00 IS $799.00

Attention! Mac Users! Special Purchase

Kodak

Kodak Color Digital Printer



$799

limited quantity

- model 450GL
- 16.7 million colors
- 256 levels gray
- NuBus card for Mac
- thermal dye transfer
- scratch resistant output
- limited factory 1 yr warranty

Mac Software Titles in stock at up to 80% off

FAX (714) 558-8849

Retail Store (714) 558-8813

Corporate and Government Sales (800) FONE-ACP

Advanced Computer Products, Inc.

ACP SUPER STORE Since 1976

1310 E. Edinger Santa Ana, CA

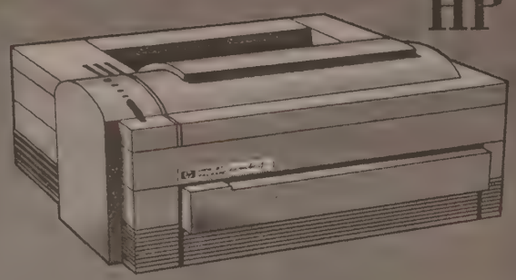
Edinger at Grand

©1993 ACP, Inc. Prices subject to change without notice. All logos and trademarks are copyrights and trademarks of their respective owners

Store Hours Mon-Thurs 9-6, Fri-Sat 9-5

We Have Done It Again!!!

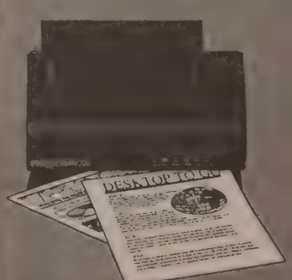
HP LaserJet 4L Printer



- 4ppm
- Paper Tray
- 300x300 dpi
- Up to three users
- 26 scalable fonts
- Prints on envolpes

$509

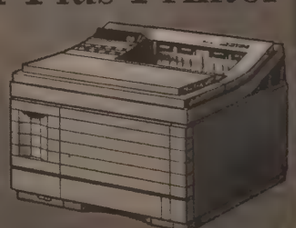
HP DeskJet 320 Printer



- 3ppm
- Optional Color
- 600x300 dpi

$315

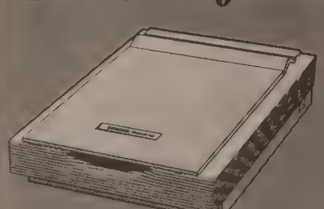
HP LaserJet 4 Plus Printer



- 12ppm
- 6 Users
- 600x600 dpi

$1365

HP ScanJet IIcx Scanner



- TWAIN & OCR
- 256 gray levels
- Scans 1600 dpi

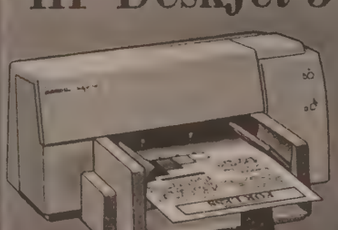
$725*

HP LaserJet 4P Printer

- 4ppm
- 1 to 3 Users
- 600x600 dpi

$904

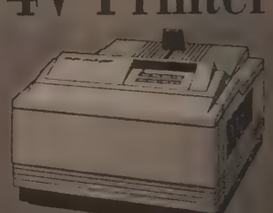
HP DeskJet 540 Printer



- 3ppm
- Optional Color
- 600x300 dpi

$275

HP LaserJet 4V Printer



- 16ppm
- Up to 9 users
- 600x600 dpi

$1895

HEWLETT® PACKARD
Authorized Dealer

NEW TECHNOLOGIES COMPUTER APPLICATIONS

Corporate & Educational PO's	VARS & Large Volume Orders	Retail Sales	
Call 310 / 948-2060	Call 310 / 949-8200	Call 818 / 356-0391	Call 818 / 965-7004
FAX 310 / 942-0440	FAX 310 / 801-9901	FAX 818 / 356-0068	FAX 818 / 913-6936
Address 11861 E. Telegraph Rd. SANTA FE SPRINGS		Address 461 N. Lake Ave. PASADENA	Address 19230 E. Colima Rd ROWLAND HIEGHTS

Office Hours: Monday thru Friday 9am-7pm, Saturday 10am-6pm, Closed Sunday

(All Prices Reflect a 3% Cash Discount. Ad must be presented to obtain prices shown. Prices are subject to change without cause or notice. Prices good through 2/19/95. *Reflects price after $75 Rebate Offer)

Nobody Can Touch Our Pricing

On Complete Systems

intel inside pentium processor

FCC & NOVELL APPROVED

Intel 486™ Vesa Local Bus

Win Max Plus

Intel™486 DX2/66 Mhz Microprocessor
8MB RAM
560 MB Hard Drive
IDE Controller Card
1.44 Floppy Drive
VLB Graphics Card
Hi-Resolution Mouse
Mini Tower Case
14" CTX SVGA Color Monitor
Enhanced 101 Keyboard

DX2/66MHz

$1,185

Intel Pentium™ Processor Based

Win Express

Intel Pentium™ Microprocessor
8MB RAM
420 MB Hard Drive
PCI Graphics Card with 1MB
Hi-Resolution Mouse
Mid Tower Case
1.44 Floppy Drive
Enhanced 101 Keyboard
14" CTX SVGA Color Monitor
Creative Labs CD ROM with 16bit Sound Blaster

60MHz **$1,775**

90MHz **$1,995**

90 DAYS SAME AS CASH - OAC

Corporate & Educational PO's
Call
310 / 948-2060
FAX 310 / 942-0440

VARS & Large Volume Orders
Call
310 / 949-8200
FAX 310 / 801-9901

Address
11861 E. Telegraph Rd.
SANTA FE SPRINGS

Retail Sales

Call
818 / 356-0391
FAX 818 / 356-0068
Address
461 N. Lake Ave.
PASADENA

Call
818 / 965-7004
FAX 818 / 913-6936
Address
19230 E. Colima Rd
ROWLAND HIEGHTS

NEW TECHNOLOGIES COMPUTER APPLICATIONS

Office Hours: Monday thru Friday 9am-7pm, Saturday 10am-6pm. Closed Sunday

All Prices Reflect a 3% Cash Discount. Ad must be presented to obtain prices shown & prices are subject to change without cause or notice. Prices good through 2/18/95. The Intel Inside and Pentium Processor Logos are Trademarks of Intel Corporation. The monitor shown on this ad is the CTX 15" 1561LR Color Monitor.

TELECOMMUTING • BY ROBERT MOSKOWITZ

"Software Park" Now Open

Dual Purpose Virtual And Physical Community Opens For Business

From time to time, I have referred to so-called "intentional communities" of people who gather in one place to do business along the Internet.

We all understand that, with telecommuting helping to eliminate the obstacles normally associated with physical distance, it's natural for people to cluster together electronically, using the Internet and other pathways to maintain virtual contact as though they were neighbors. What piques my interest even more, however, is why such people would then want to move their homes and families, offices and workshops, so they are physically near each other, as well.

"Teleworking Partners" are companies that do not have an office in the **software park**, but like to be considered one of the members of the **community**.

In previous discussions, I've referred to several of these intentional communities. For example, people are moving to Canby, Oregon, where the city is wired with fiber optic, and where local utilities and other government agencies are emphasizing telecommunications-based activities. In upper Sonoma County, around Petaluma, California, a community of network-connected health care experts is forming. These people want to get away from urban blight and traffic, but want to be near people with similar professions and interests. In Telluride, Colorado, there is a group of people interested in networking and a good deal of infrastructure—T-1 lines and fiber optics, for example—although the community has not yet focused on any one specialty.

I recently received information from sources in and around Linz, Austria, about a new community being formed, the Hagenberg Software Park. About twenty companies and five research institutes are currently involved in the community, loosely organized around the University of Linz. Although all of the organizations are pursuing some aspect of software development, each has developed a niche of its own, such as "technical" software, "marketing" software, and "office automation" software.

The first companies moved into the software park in 1991. At this time two companies (Uni Software Plus and Softwarehouse Europe) already had an office in town, and simply moved to the new location.

Among other companies to join in the earliest stages of Hagenberg's growth have been Siemens, Art & Technology, Phi-Tech (which has since moved out), Mayreder Consult, and GCL.

Here is a brief listing of current members of Hagenberg Software Park, and their specialities:

AMS/STIWA—Software development for CIM, production planning.

ART & TECH INSTITUTE—Multimedia, part of the college of art.

BRUCKNER KONSERVATORIUM—Computer and music.

CAE—Software for mechanical and automotive engineering, control techniques.

DATA NET—Telecommunication networking.

ECONIC—Software for environmental construction.

FAW (Forschungsinstitut fvr anwendungsorientierte Wissensverarbeitung)—Research institute for applied knowledge engineering.

FHS—Software engineering.

FLLL (Fuzzy Logic Laboratorium Linz)—Fuzzy logic, fuzzy control, industrial applications.

GCL—Software and technologies for tunnel construction.

GENESIS—Center for security, cryptography.

GOS—Software for geometric problems.

GDEL-SCHOOL—Industrial representative of RISC-Linz.

GUP—Research group for graphics and parallel computation graphics, simulation, parallel and distributed processing, supercomputing.

KAINDLEINSBERGER, Klaus Peter—Tax consultant.

LIZENS (Linz Center for Supercomputing)—Supercomputing, high-performance computing, networking.

MACH, Ing. Helmut—Volutionary programming and complex machine learning.

MAYREDER Consult—Development and consulting for tunnel construction.

OEFMS (Austrian Research Institute for Autonomous Intelligent Systems and Microtechnology)—High-level modeling and simulation of autonomous intelligent systems, modeling and simulation of application processes, tool evaluation and case studies for micromechanics and new microtechnologies.

PROGRAMMIERFABRIK Hagenberg—Outsourcing software development.

RISC (Research Institute for Symbolic Computation)—Computer algebra, computational geometry, multimedia software, neural networks, expert systems, parallel computation, software

continued on page 191

We'll UPGRADE Your 386 to a 486 for only $89

Lti

BEATS SUPERSTORE PRICES!

386DX&SX DEMO AS NEW COMPUTERS from $350*

*One-year limited warranty on used computers.

90 MHz PCI Mid-Tower

Best Deal in So California

FULL SYSTEM w/Color Monitor **$499**

- 386SX-33MHz CPU
- 14" SVGA **Color Monitor**
- 2MB DRAM Memory
- AMI BIOS
- 80MB IDE HD • 2S/1P Ports
- 1.44MB x 3.5" Floppy Drive
- Mini-Tower Case w/220-w PS
- 101-key Enhanced Keyboard
- 3-button MS-compatible Mouse
- FCC / UL / CSA Approved

BudgetStretcher! 33

FULL SYSTEM w/Color Monitor **$689**

Same as above except the CPU is the **486SLC-33** and includes 4MB DRAM!

pentium™ PROCESSOR — 90MHz *PCI* Mid-Tower (w/Color Monitor)

- Intel Pentium™ 90MHz Processor
- PCI + VESA + ISA Bus **Yes! All 3!**
- 8MB DRAM Memory (72-pin SIMMs)
- 540MB IDE HDD • 1.44MB FDD
- 256KB External Cache
- 14" SVGA N-I 0.28dp Color Monitor
- PCI SVGA Graphics Card 1MB VRAM
- FCC/UL/CSA Approved
- Mid-Tower Case w/230-w PS
- PCI Bus I/O - 2S/1P/1G
- 3-btn. MS-compatible mouse
- 101-key Keyboard
- Award BIOS

$1999

Best Deal in America!

PLUS: Lti will throw in a FREE CD-ROM 2X drive AND a FREE 16-bit Sound Card with every Pentium 90 purchase!

OfficeChamp!

VESA Local Bus 486DX-33 w/Color Monitor **$899**

- 486DX-33MHz CPU • Award BIOS
- Pentium™-Ready ZIF Socket
- 4MB DRAM Memory
- 128KB External Cache
- 420MB IDE HDD • 1.44MB FDD
- Cirrus 5428/1MB Graphics
- 14" SVGA 0.28dpi Monitor
- VL Bus I/O-2S/1P/1G
- Mini-Tower Case w/220-w PS
- 101-key Enhanced Keyboard
- 3-btn. MS-compatible mouse
- FCC/UL/CSA Approved

FastGrafik!

VESA Local Bus 486DX2-66 w/Color Monitor **$999**

Same as above except CPU is 486DX2-66MHz. This unit was the "Top o' the line" just six months ago!

Multimedia Pkg.

$229

Includes:

- Mitsumi 2X CD-ROM
- 16-bit Sound Card
- Two (2) Quality Speakers
- 14 CD-ROM Titles including Encyclopedia!

HARD DRIVES		Super VGA MONITORS		RAM UPGRADES		ACCESSORIES	
1GigaByte	$ 539	SVGA 14" 0.28dpi	$195	1MB SIMM 70ns	CALL	Mouse	$ 7
540MB IDE	$ 229	SVGA 14" N-I 0.28dpi	$229	4MB SIMM 70ns	CALL	FAX/Modem 14.4/14.4	$ 72
420MB IDE	$189	SVGA 15" N-I 0.28dpi LoRad	$329	8MB (72-pin) 70ns	CALL	Sony 2X CD-ROM	$125
210MB IDE	$ 155	SVGA 17" N-I 0.28dpi LoRad	$595	Other configurations	CALL	Colorado Tape Back-up 250MB	$149

Lti COMPUTER Your long term partner

MasterCard VISA

HOURS: 9am - 6pm Mon-Fri / Sat 10am-4pm
20265 Valley Blvd., Ste. O, Walnut, CA 91789

(909) 468-5887

FAX (909) 468-5885

Corporate Sales Line (909) 468-5882

2 YEARS TWO-YEAR LIMITED WARRANTY Lti COMPUTER

Prices shown based on cash discount. Prices and specifications subject to change without notice. All offers subject to availability from our vendors. Not responsible for typographical errors. All trademarks, registered trademarks, product names and logos are the property of their respective owners.

M/T1194 © 1994 Lti Computer Inc. All rights reserved. FB/CO adnov94.pm5

MICRO MARKETPLACE

Impossible Prices!!!

Best Quality With The Best Service

486DX2-66MHz

Pentium Ready (ZIF)
(256KB Cache)
200W Power Supply
Supply Mini-Tower Case
4MB RAM
420MB Hard Disk
VESA Super I/O & IDE Controller
101 Enhanced Keyboard
1.44MB Floppy Drives
SVGA Monitor (.28dpi, Multi-Freq.)
1MB VESA SVGA Card
HI-RES Mouse

$895

IBM 486 66MHz 486SLC 33MHz

(made in USA)
Super Mini Digital Case
4MB RAM
250MB Hard Disk
Super I/O & IDE Controller
101 Enhanced Keyboard
1.44MB 3 1/2" Floppy Drive
SVGA Monitor w/Card
Hi-Res Mouse

$849/ $749

PENTIUM

P5 PENTIUM 60 .....$1529
P5 PENTIUM 66 .....$1629
P5 PENTIUM 90 .....$1729

Mini-Tower Case
8MB RAM
540MB Harddrive
1.44 3 1/2" Drive
101 Enhanced Keyboard
14" Monitor .28 NI
PCI 2MB SVGA Card
(Windows Accer.)
PCI 64 Bit IDE/IO Controller
Mouse

PENTIUM 60 **$1529**

Nobody beats CYGMA system prices & quality

SPECIAL OF THE MONTH

HYUNDAI MULTI-MEDIA SYSTEMS

HYUNDAI 486SX-33
4MB RAM
1.44MB Floppy Drive
250MB Hard Drive
SVGA 14" Color Monitor (Hi-Com)
101 Keyboard
Hi-Res Mouse
Multi-Media Pack

$1,095

HYUNDAI 486DX2-66
4MB RAM
1.44MB Floppy Drive
420MB Hard Drive
SVGA 14" Color Monitor (Hi-Com)
101 Keyboard
Hi-Res Mouse
Multi-Media Pack

$1,295

VESA Local Bus Stations

486DX-66MHz	$395
486DX-33MHz	$349
486DX2-50MHz	$365
486SLC-66MHz	$345

NETWORKING EXPERTS–CALL–FOR CONSULTATION

CYGMA NOTEBOOK SPECIALS

AST

386SL Penbased Notebook
4MB RAM 120MB H.D.D.
PCMCIA Type II Slot
DOS 6 & Windows 3.1

$97

SCEPTOR

486 SLC-50 MHz 4MB RAM
260MB Hard Drive
Trackball Built-in
3 1/2" 1.44 Floppy
DOS 6 & Windows 3.1
VGA LCD
Carrying Case

$125

TOSHIBA

486SX Enhanced SL33 Mhz
T-1910
Video & Graphics Accelerator
1.44 I.D.D.
VGA LCD w/64 gray scales
PCMCIA 2.01 type ii slot
DOS, Windows

$129

•MULTI-MEDIA•

Sony
Double Speed CD-ROM Amplified Speakers Lab-Tech (pair)
14 CD-TITLES
Smart-CD Pak (speed CD-ROM up to 30 times)
16-Bit Sound Card (True 16 Bit)

$22

CREATIVE LABS

Discovery Kit
Double Speed CD-ROM Drive 320ms
300kb/sec.Sound Blaster 16 bit stereo,
CD quality sound card.Includes Groliers Encyclopedia, Games & More!
Amplified Speakers Inc.

$25

Ask us about Free-Software Packa w/Complete Systems Service, Repai Maintenance Experts • Ask us abo 3, 6, or 12 month interest-free financing (Quick Approval)

Monitors

SVGA 14" (.39).....$195
SVGA 14" (.28).....209
SVGA 14" (.28) NON-INTERLACED.....219
SVGA 15" (1280x1024, .28dpi), Low-Rad, Flat.....319
SVGA 17" (1280x1024, .28dpi) NON-INTERLACED.....599

Hard Disks

250MB IDE DRIVE.....$159
420MB IDE (10.5 m.s.).....185
540MB IDE (12 m.s.).....199
1 GB.....469
2 GB SCSI.....999

RAM

1M TO 2M.....CALL
2M TO 4M.....CALL
1M TO 4M.....CALL
4M SIMM.....CALL
1.2M FDD.....CALL

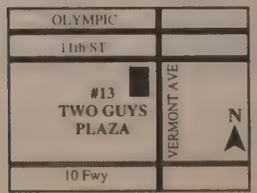
Modems & Accessories

MOUSE.....$8
TRACKBALL.....20
MODEM.....29
FAX MODEM.....37
FAX MODEM 14400 BAUD.....65

NETWORKING SPECIALIST

Printers & Scanner

PANASONIC 2130.....$22
CANON PRINTERS.....Ca
PANA LASER 4410.....48
HP LASER 4 & 4L.....Ca
HP DESKJET 500, 500C, 550C...Ca
EPSON PRINTERS.....Ca



M-F 9am-7pm Sat 10am-6pm

VISA MasterCard

Toll Free Sales Hot Line
1-800-700-7331

CYGMA COMPUTER

1133 S. VERMONT AVE. #13 • Los Angeles, CA 90006
TECH SUPPORT 213. 368-7331
FAX 213. 368-7335

PRICE BASED ON CASH DISCOUNT • PRICE MAY CHANGE WITHOUT NOTICE • Cygma Is Not Responsible For Any Typographical Errors

OUR ENERGY GOES INTO EXCELLENCE

Pentium PCI

- Intel 64-Bit Pentium Processor
- 256K Cache
- 8MB RAM
- 540MB IDE Hard Disk
- Teac 1.44MB Floppy Drive
- 14" SVGA Non-Interlaced Monitor (1024x768NI, Green Energy Saving 72Hz)
- PCI Windows Accelerator Card (1MB Exp. to 2MB 16.7 Million Colors, 1280x1024)
- PCI Enhanced IDE Controller with 2 Serial, 1 Parallel, 1 Game port
- 101-Key Enhanced Keyboard
- Hi Resolution Mouse
- Mid Tower Case with 230W Power Supply
- 1 Year Parts
- 5 Years Labor

$49 per Month OAC

Pentium 90.....$1795
Pentium 100.....Please Call

486 VESA Local Bus

- 256K Cache
- P24T/Overdrive Ready
- 4MB RAM (70ns)
- 420MB IDE Hard Drive
- Teac 1.44MB Floppy Drive
- 14" SVGA Non-Interlaced Monitor (1024x768NI, Green Energy Saving, 72Hz)
- 32-Bit VL Bus Windows Accelerator Card (1MB Exp. to 2MB 16.7 Million Colors, 1280x1024)
- 2 Serial, 1 Parallel, 1 Game Port
- 101-Key Enhanced Keyboard
- Hi Resolution Serial Mouse
- Mini Tower Case with 230W Power Supply
- 1 Year Parts Warranty
- 5 Years Labor Warranty

As Low as $27 per Month OAC

486DX-33.....$945
486DX2-66.....$995
486DX2-80.....$995

DOUBLE SPEED MULTIMEDIA

PANASONIC CD-ROM
SOUND BLASTER 16
MULTIMEDIA SPEAKERS
4 CD TITLES

$215

TRIPLE SPEED MULTIMEDIA

NEC 3XI CD-ROM
SOUND BLASTER SCSI-2
MULTIMEDIA SPEAKERS
4 CD TITLES

$369

QUAD SPEED MULTIMEDIA

TEAC 4X CD-ROM
SOUND BLASTER 16
MULTIMEDIA SPEAKERS
4 CD TITLES

$319

CALL FOR UPGRADES

HARD DRIVE

CONNER 420MB IDE	$179
MAXTOR 540MB IDE	$212
QUANTUM 530MB IDE	$210
QUANTUM 730MB IDE	$265
WESTERN DIGITAL 1.08GB IDE	$415
CONNER 1.06GB SCSI-2	$495
SAMSUNG 560MB	$199

MOTHERBOARD

PENTIUM 90 INTEL; 256K 4 PCI 2 VESA 3 ISA SLOTS; AMI BIOS; ZIF	$839
PENTIUM 66 INTEL; 256K CACHE; 3 PCI 4 ISA SLOTS; AMI BIOS; ZIF	$695
486DX-33 INTEL; 256K CACHE; 3 VESA SLOTS; AMI BIOS; ZIF SOCKET	$220
486DX2-66 INTEL; 256K CACHE; 3 VESA SLOTS; AMI BIOS; ZIF SOCKET	$259
486DX2-80 AMD; 256K CACHE; 3 VESA SLOTS; AMI BIOS; ZIF SOCKET	$249

VIDEO CARDS

Cirrus Logic VLB 1MB	$75
Cirrus Logic VLB 2MB	$115
S3 VLB 1MB	$75
S3 VLB 2MB	$115
Diamond Stealth 24 VLB 1 MB	$125
Diamond Stealth 64 VLB 2MB D-RAM	$215
Diamond Stealth 64 VLB 2MB V-RAM	$315
Diamond Viper VLB 2MB V-RAM	$250
ATI MACH 32 VLB 1MB D-RAM	$110
ATI MACH 32 VLB 2MB D-RAM	$169
ATI MACH 64 VLB 2MB D-RAM	$180
ATI MACH 64 VLB 2MB V-RAM	$335
ATI MACH 64 VLB 4MB V-RAM	$499
Diamond Viper PCI 2MB V-RAM	$269
Diamond Stealth 64 PCI 2MB D-RAM	$210
Diamond Stealth 64 PCI 2MB V-RAM	$315
Diamond Stealth 64 PCI 4MB V-RAM	$495
ATI MACH 32 PCI 1MB D-RAM	$120
ATI MACH 32 PCI 2MB D-RAM	$170
ATI MACH 32 PCI 2MB V-RAM	$255
ATI MACH 64 PCI 2MB D-RAM	$229
ATI MACH 64 PCI 2MB V-RAM	$355
ATI MACH 64 PCI 4MB	$539

MONITOR

MGC 1458, 14" 1024x768; NI; .28mm	$205
MGC 1588, 15" 1280x1024; NI; .28mm	$290
MAG DX17F, 17" 1280X1024; NI; .26mm	$645

CD ROM

PANASONIC DOUBLE SPEED	$120
MITSUMI DOUBLE SPEED	$117
NEC TRIPLE SPEED SCSI-2	$229
TEAC QUAD SPEED IDE	$199
TOSHIBA QUAD SPEED SCSI-2	$279
PLEXTOR QUAD SPEED SCSI-2	$379
MITSUMI QUAD SPEED	$215

SOUND CARD

SOUND BLASTER 16 BASIC	$78
SOUND BLASTER 16 MCD	$79
SOUND BLASTER 16 MCD ASP	$142
SOUND BLASTER 16 SCSI-2	$99
SOUND BLASTER 16 SCSI-2 ASP	$162
SOUND BLASTER AWE 32	$248

THETA COMPUTER CORPORATION OF AMERICA

3200 Airport Ave. #22 • Santa Monica • CA 90405

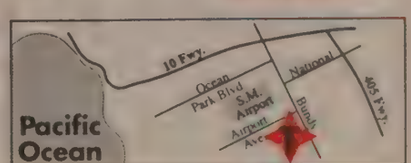
(310) 572-1613

FAX # (310) 572-1615

Corporate P.O.'s Accepted!

Business Hours:
M-F 9:00A.M.- 6:00P.M.
& Sat. 10A.M. - 4P.M.

90 Days Same As Cash. Financing Available.



Prices include 3% cash discount. Prices & Specifications are subject to change without notice. Not responsible for any typographical errors.

Whether your office has one computer or one hundred....

We keep you working

AUTHORIZED TECHNICAL SERVICES has the experience *and* the expertise to handle your equipment service needs. Whether you're running one small office with one micro computer, or a statewide network of offices with a complex inventory of computers, video display terminals, printers and data communications devices—you simply cannot afford "down time". Call **ATS** today to find out just how easy it is to stay productive

ATS
AUTHORIZED TECHNICAL SERVICES
1-800-451-4057

HERE'S A PARTIAL LIST OF EQUIPMENT WE SERVICE:
MICROCOMPUTERS: Dell, Epson, Advance Logic (ALR), AT&T, Everex, Leading Edge, AST Research, Compaq, IBM. **LOCAL AREA NETWORKS:** 3Com, Novell. **STORAGE DEVICES:** IOmega (Bernoulli). **DOT MATRIX PRINTERS:** Alps, Datasouth Epson, NEC, Panasonic, Citizen, Texas Instruments, C. Itoh, Digital Equipment (DEC), IBM, Okidata, Printek, Toshiba. **PLOTTERS:** Hewlett-Packard, IBM. **THERMAL PRINTERS:** IBM, Texas Instruments, Panasonic. **LINE PRINTERS:** Data Products, Printronix. **LETTER QUALITY PRINTERS:** C. Itoh, Diablo, NEC Spinwriters. **LASER PRINTERS:** Canon, Epson, IBM, AST, TI, Hewlett-Packard. **VIDEO DISPLAY TERMINALS:** Digital Equipment (DEC), Link, Qume, Tab, Televideo, Wyse. **DATA COMMUNICATIONS:** Hayes.

ATS SERVICE CENTERS:
Los Angeles (310) 839-0020
Orange County (714) 937-0332
Oakland (510) 638-4449
Sacramento (916) 923-2944
San Jose (408) 970-9860

WHOLESALES TO PUBLIC!

FREE mouse and Softwares with complete system purchase

SUPER ECONOMY SYSTEM

386SX-40 $177	386DX-40 $197	SYSTEMS INCLUDE	486DLC-75 $339	486DX2-50 $298
486DLC-40 $229	486SX-33 $268	Mini Tower Case 1MB RAM 1.44 MB Floppy Drive Super I/O Controller 2 Serial / 1 Parallel 1 Game port Clock and Calendar Onboard Cache 101 enhanced-Keyboard 1 Year Warranty 72-hour burn-In Test	486DX2-66 $368	PENTIUM-60 $678
486SLC2-66 $269	486DX-40 $298		PENTIUM-66 $839	PENTIUM-90 $938

COMPLETE VESA LOCAL BUS/PCI SYSTEM

MUTIMEDIA SPECIAL

2X Speed CD-ROM	4X Speed CD-ROM
16 bit Sound Card	16 bit Sound Card
Speakers	Speakers
$175	$355

Mini Tower Case
4 MB RAM
1.44 MB Floppy Drive
260 MB Hard Drive
14" SVGA Monitor .28
VESA I/O Controller
2 Serial / 1 Parallel
1 Game port
1 MB VESA SVGA Card
101 enhanced Keyboard
LifeTime Labor Warraty
1 Year Parts Warranty
72-hour burn in Test

486DX2-66 $874	PENTIUM-60MHz $1168
PENTIUM-66MHz $1198	PENTIUM-90MHz $1449

NOTEBOOK ON SALE

WE WILL MATCH ANY ADVERTISED PRICE !!

TOSHIBA

MODEL	CPU	DISPALY	RAM	HARD	PCIMCI	PRICE
ThinkPad360	486SX-33	9.5" Mono	4/20	170	1/II or 1/III	1839
ThinkPad360CS	486SX-33	9.5" Color D/S	4/20	170	1/II or 1/III	2265
ThinkPad360C	486SX-33	8.4" Color D/S	4/20	170	1/II or 1/III	2759
ThinkPad500	486BL-50	8.4" Mono	4/20	200	1/II or 1/III	1019
ThinkPad510CS	486BL-50	8.4" Color D/S	4/20	200	1/II or 1/III	2269
ThinkPad755CS	486DX2-50	8.4" Color Act.	4/20	170	1/II or 1/III	3279
ThinkPad755CS	486DX2-75	8.4" Color Act.	4/20	170	1/II or 1/III	3675
ThinkPad755C	486DX2-50	8.4" Color Act.	4/20	170	1/II or 1/III	4279
ThinkPad755C	486DX2-75	8.4" Color Act.	4/20	170	1/II or 1/III	CALL

TEXAS INSTRUMENTS

4000EWinDx2/40	486DX2-40	8.2" Color Pass	4/20	200	Ext. Opiton	1989
4000EWinDx2/50	486DX2-50	8.4" Color Act.	4/20	200	Ext. Option	2759
4000EWinDx4/75	486DX4-75	8.4" Color Act.	4/20	340	Ext. Option	3549
4000EWinDx4/75	486DX4-75	9.5" Color Act.	4/20	450	Ext. Option	4359
TM4000M	486SX2-50	9.4" Color Act.	4/20	200	2/II or 1/III	2679
TM4000M	486SX2-50	8.4" Color Act.	4/20	340	2/II or 1/III	3259
TM4000M	486DX4-75	8.4" Color Act.	4/20	340	2/II or 1/III	4859
TM4000M	486DX4-75	9.5" Color D/S	4/20	450	2/II or 1/III	4399

MODEL	CPU	DISPALY	RAM	HARD	PCIMCI	PRICE
T1910	486SX-33	9.5" Mono	4/20	200	1/14.5mm	1419
T1910CS	486SX-33	9.5" Color D/S	4/20	200	1/14.5mm	1939
T1960CS	486DX2-50	9.5" Color D/S	4/20	200	1/14.5mm	2259
T1960CT	486DX2-50	8.4" Color Act.	4/20	200	1/14.5mm	2869
T2400CS	486DX2-50	9.5" Color D/S	4/20	250	1/II+1/III	2839
T2400CT	486DX2-50	8.4" Color Act.	8/24	250	1/II+1/III	3499
T3400CT	486SX-33	7.8" Color Act.	4/20	250	1/II	2799
T3600CT	486DX2-50	8.4" Color Act.	8/24	250	1/II	3899
T4700CT	486DX2-50	9.5" Color Act.	8/24	200	1/II+1/16mm	4269
T4800CT	486DX4-75	9.5" Color Act.	8/24	320	1/II+1/16mm	5389
T4900CT	Pentium-75	9.5" Color Act.	8/24	320	1/II+1/16mm	6379

NEC

VERSA S/33M	486SX-33	9.5" Mono	4/12	210	2/II or 1/III	1699
VERSA S/33D	486SX-33	9.5" Color D/S	4/12	210	2/II or 1/III	1889
VERSA V/50D	486DX2-50	9.5" Color D/S	4/20	250	2/II or 1/III	2799
VERSA V/50C	486DX2-50	9.5" Color Act.	4/20	250	2/II or 1/III	3559
VERSA M/75D	486DX4-75	9.5" Color D/S	8/40	340	2/II or 1/III	3819
VERSA M/75C	486DX4-75	9.5" Color Act.	8/40	340	2/II or 1/III	5099

YES!, WE DO NETWORK INSTALLATION

NA-RAE COMPUTER

3450 W 6th St 110 Los Angeles, CA 90005 (6th and Kenmore)

(213)388-1700 Fax (213)388-1795

Mon - Sat 9 a.m. - 7p.m. Sun 12 p.m. - 7p.m.

Personal or Group training Available!

Major Credit Cards Welcome.

All prices above are cash discount price. Price subject to change without notice. Narae Computer is not responsible for any typographical errors

Inventory Clearance Sale !

New Pentium Chip Only - Multimedia Family Systems

Pentium 90Mhz Multimedia

Intel Pentium 90Mhz & Heat Sink Fan
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
15" Digital SVGA Monitor 0.28mm
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,999

Pentium 60Mhz Multimedia

Intel Pentium 60Mhz & Heat Sink Fan
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,699

4DX2-80Mhz Multimedia

486DX2-80Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,189

4DX2-66Mhz Multimedia

486DX2/66Mhz CPU & Heat Sink
VLB Green 256K Cache ZIP 5V,3.3V
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28mm
101 Enhanced Keyboard
3 Button Mouse & Pad
Double Speed CD-ROM Panasonic
16 bit Sound Blaster Original Card
Amplified Stereo Speakers
CD titles 3CDs w/Encyclopedia

$1,149

Power & Performance - Business Work Station

Pentium 90Mhz

Intel Pentium 90Mhz CPU
CPU Cooling Fan & Heat Sink
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad

$1,699

Pentium 60Mhz

Intel Pentium 60Mhz CPU
CPU Cooling Fan & Heat Sink
On Board PCI IDE Controller
256K Cache Memory & Phoenix Bios
8M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
PCI Graphic Accelerator w/1M
Digital Medium Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad

$1,499

4DX2 - 80Mhz

486DX2/80Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
Upgradable to DX4/100Mhz
4M RAM 72 Pin
540MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" Svga NI Green Mtr 28 Full Screen
101 Enhanced Keyboard
3 Button Mouse & Pad

$999

4DX2 - 66Mhz

486DX2/66Mhz CPU & Cooling Fan
VLB Green 256K Cache ZIP 5V,3.3V
Upgradable to DX4/100Mhz
4M RAM 72 Pin
420MB IDE Hard Drive
3.5" Floppy Drive
32bit I/O & IDE Controller 2S,1P,1G
32bit S-3 Accelerator w/1M
Digital Mini Tower Case w/Power
14" SVGA Monitor 0.28mm
101 Enhanced Keyboard
3 Button Mouse & Pad

$899

Notebook Special ! - Lowest Price & Best Quality

4DX2-66 Color

Intel 486DX2/66Mhz CPU
PCMCIA II & III, LCD Display
Upgradable to DX4/100Mhz
4M RAM Expandable to 32MB
340MB Hard Drive
3.5" Floppy Drive, Removable
32bit VESA Local Bus 1024x768,256
10.4" Dual Scan Color Screen
NiMH Battery 2.5hrs (5hrs w/2nd Batt)
Built in 16bit Sound w/Speaker & Mic
Trackball Installed
DOS & Windows Diskette & Book

$2,299

4SLC2/50 Note

486SLC2/50Mhz CPU
4M RAM
200MB Hard Disk Drive
1.44 Floppy Disk Drive
64 Gray Scale Screen
9.5" Diagonal Screen
512K VGA Card
Autoswitchable 100 to 240 VAC
Lightweight 5.7lbs w/Battery
1 Year Warranty
Toll-Free Technical Support
Assured by ISO 9001 Certification

$1,049

This Month Special-560MB HDD $199

486 VLB Board w/256K ZIP 3V	$99	14" SVGA Monitor 0.28mm	$199
1.2MB Floppy Disk Drive	$44	14" NI SVGA Monitor 28 Green	$219
1.44MB Floppy Disk Drive	$39	15" Digital Monitor 1280x1024	$319
S-3 32bit VLB Accelerator	$79	17" Digital Monitor 1280x1024	$619
Trident PCI w/1M DRAM	$105	9600/2400 BPS Fax/Modem	$29
ATI PCI Mach 32 w/1M DRAM	$109	14400 BPS Fax/Modem	$59
ATI PCI Mach 64 w/2M DRAM	$199	Mini Tower Case Digital LED	$39
ATI PCI Mach 64 w/2M VRAM	$279	Medium Tower Case w/LED	$59
Panasonic 2X SP CD-ROM	$129	Desk Top Case Digital LED	$59
Teac Quad Speed CD-ROM	$209	Big Tower Case w/LED	$79
Sound Blaster 16 Bit Original	$79	MicroSoft Original Mouse	$34
Network NE-2000 Comp. Card	$49	MicroSoft New Keyboard	$89

Quality Components / Lowest Price !

90 days Same As Cash

Financing Available in 10 Min.

For Approved Credit Only, Price based on Cash Discount
Prices subject to change without notice.

VISA MasterCard

Lantastic Network / Accounting

One Year Parts & Labor Warranty

CP TECHNOLOGY

12880 Beach Blvd. #C
Stanton CA 90680
Phone 714-894-5063

Fax 714-894-0762

Mon-Fri:9am-7pm / Sat:10am-6pm

Search No More !! We Provide You With The Best Quality Products and Affordable Price

MELCO GROUP

Pentium Power

3 PCI Slots
8MB RAM, 1.44MB F.D.D. (3.5")
540MB H.D.D.
PCI IDE H.D.D. Ctrl.
PCI Diamond Stealth 64 VRAM or ATI Mach 64 VRAM w/RMK
15" N-Int. Green Digital Monitor
101 Enhanced Keyboard
Microsoft compatible serial mouse
Midi Tower case w/Digital Display
High Speed I/O **w/16550 UART**

Pentium 60MHz	$ 1700
Pentium 66MHz	$ 1800
Pentium 90MHz	$ 1975

Green 486 PC

Upgradable to **486DX4-100 CPU**
Pentium Overdrive Ready
4MB RAM, 256K External Cache
420MB H.D.D. , 1.44MB F.D.D.
VL Bus IDE + I/O Ctrl. Card
VL Bus 1MB SVGA Card
14" .28 SVGA 1024x768 **N-Int.** Monitor
Digital Mini Tower Case, Key Board & Mouse

486SX-33 MHz	$ 859
486DX-33 MHz	$ 899
486DX2-66 MHz	$ 989
486DX2-80 MHz	$1079
486DX4-100 MHz	$1339

Pentium System

3 PCI Slots
4MB RAM
1.44MB F.D.D. (3.5")
420MB H.D.D.
PCI IDE H.D.D. Ctrl.
PCI 64 Bits SVGA Card w/1MB
14" N-Int. Green Monitor
101 Enhanced Keyboard
Microsoft compatible serial mouse
Digital Midi Tower Case

Pentium 60MHz	$ 1439
Pentium 66MHz	$ 1569
Pentium 90MHz	$ 1675

BAREBONE SYSTEMS

Systems Include :
1.44MB F.D.D., IDE+I/O, Mini Tower Case
101 Key Board, Serial Mouse

386SX-40MHz	$ 179
386DX-40MHz	$ 189
486SX-33MHz	$ 280
486DX-33MHz	$ 375
486DX2-50MHz	$ 385
486DX2-66MHz	$ 425
486DX2-80MHz	$ 450
486DX4-100MHz	$ 749
Pentium 60MHz	$ 755
Pentium 66MHz	$ 850
Pentium 90MHz	$ 999

Melco 300 Series Mono Notebook

Monochrome Display
4MB Ram, Up to 20MB
1.44MB, 3.5" F.D.D.
Removable H.D.D.
512K Video RAM
PCMCIA Type I,II,III
9.5" LCD Screen
2 Serial, 1 Parralel Port
PS/2 Key Board Port
External VGA Port
Microjoystick Mouse
Removable NI-Cad Battery
MS-DOS 6.22

Model / H.D.D.	486DX2-50	486DX2-66
260MB	$ 1395	$ 1495
340MB	$ 1495	$ 1595
520MB	$ 1695	$ 1795

Melco 320 Series Color Notebook

Dual Scan Color
4MB Ram, Up to 20MB
1.44MB, 3.5" F.D.D.
Removable H.D.D.
512K Video RAM
PCMCIA Type I,II,III
9.5" LCD Screen
2 Serial, 1 Parralel Port
PS/2 Key Board Port
External VGA Port
Microjoystick Mouse
Removable Ni-MH Battery
MS-DOS 6.22

Model / H.D.D.	486DX2-80	486DX4-75
260MB	$ 2195	$ 2295
340MB	$ 2295	$ 2395
520MB	$ 2495	$ 2595

Melco Multi Media Pentium 90 Notebook

Pentium 90MHz, 16Bits Stereo Sound Blaster
8MB RAM, 1.44MB F.D.D., Removable H.D.D.
1MB Video RAM, PCMCIA Type I,II,III
9.5" LCD Color Screen, Hgh Speed I/O
Adaptec SCSI-II Interface, VL Bus Video and
IDE Interface, VGA Monitor Port, Microjoystick Mouse
Removable NI-MH Battery, MS-DOS 6.22

w/260MB H.D.D. $ 2995
w/340MB H.D.D $ 3095
w/520MB H.D.D. $ 3295

Graphics Card

Monochrome Card	$ 12
256K SVGA Card	$ 28
512K SVGA Card	$ 38
1MEG ISA SVAG Card	$ 55
32 Bits VL-Bus w/1MB Upg. to 2 MB	$ 70
Diamond Stelath 64 VRAM w/2MB VLB	$ 285
ATI Mach64 VRAM w/2MB VLB	$ 280
64 Bits PCI w/2MB Avax	$ 145
64 Bits PCI w/2MB ATI Mach 32	$ 175
64 Bits PCI w/2MB Diamond Ste	$ 320

Interface Card

16 Bits IDE+I/O w/2s1p1g	$ 12
32 Bits VI-Bus IDE+I/O w/2s1p1g Supports 4 H.D.D.	$ 20
SCSI H.D.D. Ctrl. Card	$ 100
32 Bits VL-Bus SCSI2+IDE+I/O	$ 125
64 Bits PCI IDE H.D.D. Ctrl.	$ 25
64 Bits PCI SCSI Adaptec 2940	$ 240

Mother Board

386SX-30MHz w/CPU	$ 65
386DX40MHz w/CPU	$ 95
486SX/DX VL-Bus **Green PC M.B.** Upgradable from SX-33 to DX4-100	$ 100
486SX/DX/DX2/DX4 **VL & PCI Bus**	$ 120
Pentium 60/66 MHz	$ 210
Pentium 90/100MHz	$ 320

Sound Card

Sound Blaster 16 Basic	$ 100
Sound Blaster 16MCD	$ 120
Sound Blaster 16 SCSI2	$ 140
Pro Audio Spectrum	$ 75
Generic Sound Card	$ 60

Hard Drive

210MB IDE	$ 160
280MB IDE	$ 185
420MB IDE	$ 200
540MB IDE	$ 225
540MB SCSI	$ 275
1.08GIG IDE	$ 550
1.08GIG SCSI	$ 595

Cases

Desktop Case	$ 50
Mini Tower w/ Digital	$ 40
Mid Tower w/ Digital	$ 60
Full Tower w/ Digital	$ 75

Monitor

14" Mono Chrome Monitor	$ 90
14" SVGA .28 Int. Monitor	$ 200
14" SVGA .28 N-Int. Monitor	$ 220
15" SVGA .28 N-Int. Digital Ctrl. Monitor	$ 335
17" SVGA .28 N-Int. Digital Ctrl. Monitor	$ 610

Quad Speed MULTI MEDIA KIT

Quad Speed CD-ROM
Sound Blaster Compatible 16Bits Sound Card
14 CD-Tittles
Stereo Speaker, Microphone

$ 285

CD-ROM

Mitsumi Double Speed	$ 125
NEC 3X Speed SCSI	$ 255
Toshiba 3X Speed SCSI	$ 250
Teac Quad Speed	$ 250
Mitsumi Quad Speed	$ 245

Fax/Modem

14.4 Internal Fax/modem	$ 65
14.4 Voice Fax/Modem	$ 70
14.4 External Fax/Modem	$100
28.8 Internal Fax/Modem	$ 155

Special items

VL-Bus SVGA Card & IDE+I/O Combo	$ 95
Fast VL-Bus IDE+I/O Ctrl. Card	$ 35
AMD PCI Ethernet Card	$100
Call for more other items	

Computerize your business with **Novell** *networking !!!*

NOVELL LAN SPECIAL

1 File Server and 2 Workstation

Includes basic wiring, installation and setup

$ 4899 only !!
No Hidden cost

File Server Pentium 90 MHz
8MB RAM, 1.44MB F.D.D., 540MB H.D.D.
MGP Card and Monitor, Full Tower Case
Novell 3.12 5 Users

Workstation 486DX2-50MHz
2MB RAM, 1.44MB F.D.D., 210MB H.D.D.
SVGA Card and 14" Monitor
Mini Tower Case,Key Board and Mouse

AUTHORIZED DEALER FOR MACOLA ACCOUNTING SOFTWARE
For retail, Wholesale, Distributor, Manufacture, any industry
For four consecutive reviews, Price Water House has selected **MACOLA** as PC Magazine's "Editor Choice" award winner. The only micro base accounting software ever do so.
We provide consultation, on-site installation, Upgrade and maintain.

West L.A. Location
S.P.C.
Phn : 310-581-8462
Fax : 310-581-8464
3435 Ocean Park Blv., # 106
Santa Monica, CA 90405

Santa Fe Springs Location
Phn : 310-907-1180
Fax : 310-907-1186
12035 Burke St. #3
Santa Fe Springs, CA 90670

We honor Government, Corporate & School P.O.'s
We Accept
VISA & Master Card

Office Hours :
Mon-Friday 8:30am - 7:00pm
Saturday 9:30am - 4:00pm

It took us 6 years to become an overnight success.

To tell you the truth, it is not hard to understand why we've done so well and grown so quickly. From Washington D.C. to Chicago and L.A., our organization offers our customers a combination of products, service and experience that's difficult to match. No wonder we have been the salvation of many MIS departments of large corporations.

And an impressive number of important companies and government offices have taken advantage of our vast product line, competitive pricing and reliable service: Organizations such as The RAND Corp., L.A. Opinion, Unisys, Newport News Shipbuilding, PRC, EG&G, World Bank, NASA, Wrigley Co., CSC, and many government agencies in Washington D.C.

So let us prove it to you, too. We are big enough to handle your large orders and still small enough to give you the service you deserve. Call us!

Socrates

computer systems

310.312.5777

2242 Purdue Ave.
Los Angeles, CA

Tel. 301.770.1155
Rockville, MD

Tel. 312.455.9604
Chicago, IL

Tel. 804.722.5088
Hampton, VA

TOSHIBA

T1960 CT

- 486DX2-50 MHz Notebook
- 320 MB HD
- 4 MB RAM
- Active COlor SCreen

$2729

COMPAQ

Contura 400CX

- 486DX2-40 MHz Notebook
- 250 MB HD
- 4 MB RAM
- Active Color SCreen

$2995

NEC

Versa S/33D

- 486SX33 MHz Notebook
- 210 MB HD
- 4MB RAM
- Dual Scan Color Screen

$1449

AST COMPUTER

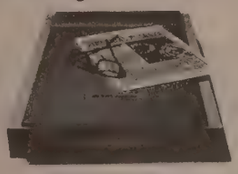
Ascentia 900N

- 486DX2-50 MHz Notebook
- 4 MB RAM
- 340 MB Removable HD
- 10.3" STN Screen

$2567

HEWLETT PACKARD

Scanjet IICX



After $150 rebate **$725**

COMPAQ

Prolinea Desktop 486DX2-66

- 420 MB Hard DRive
- 4 MB RAM, 1.44 FD
- 1 MB VLB VGA
- .28DP 14" Color Monitor

$1695

IBM

From Servers to Notebooks, Solutions with IBM

PowerMac 6100/66

- 8MB RAM, 256KB Cache
- 350 MB HD
- 1.44 Floppy Drive
- System 7.5

$1635

AST COMPUTER

Bravo LC Desktop 486DX2-66

- 270 MB Hard Drive
- 8 Mb RAM, 1.44 FD
- 1 Mb VLB VGA
- .28DP 14" Color Monitor

$1595

Seagate

ST 5850A, 854 MB

- 854 MB IDE
- Low Profile
- 11 ms Access time

$289

WordPerfect

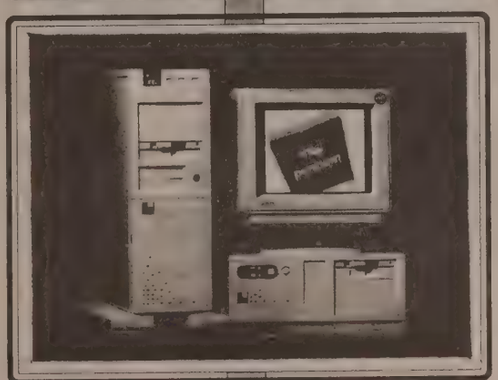
WP 6.1 For Windows

$209

Novell Ceritified Systems

- ***486DX2-66 MHz***
- 4 MB RAM
- 256KB Cache
- 420 MB HD
- VLB IDE Interface
- 1.44 Floppy Drive
- 1 MB Paradise VLB Video
- 14" .28 SVGA NI Color Monitor
- MS-DOS 6.22 & WFW W 3.11
- Microsoft Mouse
- 101 Keyboard
- Netware tested and approved
- 2 Year Limited warranty

yes NetWare Tested and Approved



$1195

pentium PROCESSOR

- ***Intel 90 MHz Pentium***
- 8 MB Ram (128 MB Max)
- 256KB Cache (Exp to 1 MB)
- *845 MB* Fast ATA HD
- PCI IDE Interface
- ATI MACH 32 PCI Video w/1 MB
- 1.44 Floppy Drive
- 15" .28 SVGA NI Color Monitor
- MS-DOS 6.22 & WFW W 3.11
- Microsoft Mouse
- 101 Keyboard
- 2 Year Limited warranty
- *MS Office Professional*

$2495

Prices subject to change without notice. Quantities may be limited. Cash or P.O only.
The logos & trade names listed are registered trade marks of their respective companies

Socrates

computer systems

310.312.5777

Internet

How To Register Domain Names

BY JOHN S. QUARTERMAN AND SMOOT CARL-MITCHELL

We've received such a large volume of responses from our domain name article several months ago, we decided to explain in more detail how to register a domain name.

First of all a few caveats about domain names.

The ISP Option

While you do not have to have a host on the Internet to have a registered domain, at least two machines on the Internet must act as servers for your domain.

You cannot just get a domain name without also having at least two servers on the Internet. You do not have to have your own server; you can have another organization act as a server for your domain name. Usually, when you get connected, your Internet Service Provider (ISP) will both register a domain for you and also provide two servers for your domain. Not all ISPs provide this service, so check around for one that does before connecting.

For example, here at Zilker Internet Park we will register a domain name for our users, if they want one. We currently do this as a no-cost service for our users. We do require at least a login account for this service. Other ISPs provide similar services. Some charge a fee to cover their cost of registration. Be aware that these fees are usually quite low (almost always under $100).

Do not be fooled by a service provider that charges more, or an organization that claims it must charge a fee for registering a domain name. If they are covering their own costs, that's fine. But if they charge you more than $100, start to ask questions, or find a reputable ISP that will register your domain name for a reasonable fee.

You can also register your own domain and set up your own server without going through an ISP. You still need to get someone else to run a second domain server for you.

If you ran both of your domain servers, both would be inaccessible when your link to the Internet was down, thus defeating the purpose of having two servers. Mail being sent to your domain would in that case be returned to sender, labelled host unknown. If the second server is elsewhere, it is likely to be up even when the one you're running is down. That way, mail for your domain will simply be queued at the sending host until your Internet link comes back up, or until a timeout period of several days expires.

To find an organization that will run a secondary nameserver for your domain, ask around at local computer clubs, or on the Net. Many ISPs will run secondaries for organizations that are not otherwise their customers. Zilker will do it, for example.

Do-It-Yourself

Here is how to register your own domain, and some of the pitfalls in this process.

If you want to run your own server, you must have an already registered IP network number for the network that contains your domain server. Today you usually obtain this from an ISP; in the past you could get an IP network number without going to a specific ISP. Due to reorganization of the IP routing infrastructure, you now must obtain an IP network number (usually a Class C address) from your ISP.

WHILE IT IS COMMON FOR AN ORGANIZATION TO HAVE ONE DOMAIN NAME AND ONE IP NETWORK NUMBER, THERE IS NO REQUIREMENT THAT IT BE THAT WAY.

You can have more than one IP network within your organization, and still have only one registered domain. Lots of people have the impression that there is one IP network number per domain and one domain per IP network. That's just not so. Domains are labels for organizations, much like company and department names. IP network numbers are addresses for networks, much like street addresses and street numbers. You can have several streets on your company or university campus, but you normally have only one company or university name. Similarly, you can have several networks inside your organization, but you still normally have only one domain name for your organization.

There are also cases where a domain may span several networks, but let's not get into that. The main point is that while it is common for an organization to have one domain name and one IP network number, there is no requirement that it be that way. Some people even get the idea that domains have numbers. They don't. Networks have numbers. Domains are names.

Another source of confusion is between hosts and domains. A host is a computer, that is, a physical piece of hardware. A domain is a label; a name. A domain may apply to a specific host, but not all domains do. For example, *latimes.com* labels an organization, the Los Angeles Times. There happens to be a specific host responding at that domain, but there doesn't have to be. For example, *buffalo.edu* labels the University of Buffalo, and there's no specific host associated with it. In addition, *news.latimes.com* presumably refers to the news department, and once again there happens to be a host associated with it, but there wouldn't have to be. At some point you reach leaf nodes on the domain tree, such as perhaps

WE PUT YOU ON THE INTERNET

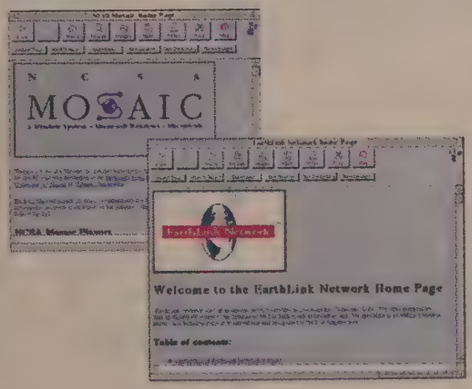
28.8K ACCESS & WIDER SERVICE AREA NOW AVAILABLE FREE!

WHAT IS THE INTERNET?

The Internet is a network of computer networks spanning the globe. It has recently evolved into the most incredible communications medium the world has ever seen.

On the Internet, business people converse with associates, students search for information in thousands of databases and information resources, and ordinary citizens find, use, download, and originate information on a nearly infinite number of topics every day.

The Internet connects you instantly to over 30 million people around the world!



We help set you up with Net "surfing" software such as Mosaic.

HOW DO I GET CONNECTED?

Until recently, getting connected to the Internet was a complicated procedure. Now, EarthLink Network connects you directly to the Internet from your home or business computer—fast and easily. All you need is a modem and the software we supply. We will answer all of your questions about the Internet and help you make it a useful and enjoyable part of your life.

EarthLink Network offers inexpensive direct access to the world-wide Internet.

Call us, and we'll fill you in on the details.

CALL NOW 213-644-9500

EarthLink Network, Inc.
3171 Los Feliz Blvd., Suite 203
Los Angeles, CA 90039 • Fax: 213-644-9510
Automated info via email: info@earthlink.net
Live human via email: sales@earthlink.net

EarthLink Network™

©1994 EarthLink Network, Inc. Trademarks are property of their respective owners.

reporterx.news.latimes.com, and those leaf nodes are normally associated with specific hosts. So some domains label hosts, but others label companies, departments, workgroups, or other organizational entities, with or without an associated specific host.

Next you can get the domain registration form from the Internet NIC. You can get this form online via FTP from the InterNIC registration server. The WWW URL for the registration form is *ftp://rs.internic.net/templates/domain-template.txt*.

You can also reach the registration service via phone or by mail at:

Network Solutions
InterNIC Registration Services
505 Huntmar Park Drive
Herndon, VA 22070
voice (703)742-4777
fax (703)742-4811

Fill the form out and return it to the registration service. The preferred method for returning the form is via electronic mail to *hostmaster@internic.net*.

The form is, for the most part, self-explanatory. Within several weeks the domain will be registered, or you will receive a notice that the domain name is already taken. Note that you must pick a domain name under one of the top-level domains. The most common choice is com which is for commercial companies. So, for example, we picked the name tic under the com domain.

If you are in Europe, check with *hostmaster@ripe.net*, or look on *ns.ripe.net* with FTP to get current European registration forms.

At the present time, you must pick a name directly under one of the top-level domains. You cannot pick a name like *on.the.info-highway.com* . You can pick the name *info-highway.com* and then create the domain name *on.the.info-highway* yourself. Once you have your domain registered, you can create any sub-domains that you want.

Staking Out Turf

Can you reserve domain names for future Internet access? If you can find an ISP that will serve your domain, there is nothing that prevents you from reserving domain names for future use. That is, you can simply have the domain present on the Net, but without it serving any function. Right now, there is no requirement that your domain name be served immediately. The form does ask when the domain will be operational. This is so the InterNIC can place the domain in the root tables of the DNS system. They will not do this until your servers are up and running.

Of course, you can also register a domain for use through the UUCP network, or through some other network. A domain doesn't have to be used on the Internet. Setting up a domain for use with UUCP is a longer story than we want to go into here, however.

That is essentially the procedure for registering a domain name. You can do it yourself, if you want to, but going through an ISP is often easier and the time saved by going through an ISP is often worth the usually nominal cost.■

Copyright © 1995 by Texas Internet Consulting (TIC), tic@tic.com, (512)451-6176, fax: (512)452-0127; 1106 Clayton Lane, Suite 500W, Austin, TX 78723 U.S.A.

ARE YOU ADULT ENOUGH?

If so, please come and join our ~~hundreds~~ *thousands* of members at

HOTEL CALIFORNIA

One of Southern California's largest Computer Adult Bulletin Boards.

We offer a wide range of on-line services, such as.....

- Over 64 Lines Available
- Over 200,000 Adult Files including Text Files and Shareware
- Adult and Standard Chatlines w/Worldlink™
- FREE Internet Via Satellite
- Games
- On-Line Matchmaking
- Up-to-Date news, Weather and Sports
- And Much, Much More

Immediate Access Via Credit Card

***** ADDED BONUS *****
FREE Trial Access

SET YOUR MODEM TO **8N1** AND DIAL:

(310) 407-1300

For Adults Only! No one under the age of 18 admitted

DISCOVER THE INTERNET

NOW ONLY $17.50 PER MONTH

Unlimited access with no hourly connect fees!
Why pay long distance phone charges?

CRL brings the Internet to you with a local call from any of the following areas:

Alamitos	Compton	Glendale	La Habra	Pasadena
Alhambra	Culver City	Hawthorne	Los Angeles	Pico Rivera
Anaheim	Cypress	Huntington Beach	Mar Vista	Placentia
Beverly Hills	Downey	Inglewood	Montebello	Santa Ana
Brea	Fullerton	Irvine	Norwalk	West Los Angeles
Buena Park	Garden Grove	La Canada	N. Hollywood	Westminster
Burbank	Gardena	La Crescenta	Orange	Yorba Linda

CRL provides local Internet access to over 500 cities nationwide

A CRL personal account gives you unlimited access to E-Mail, Usenet News, FTP, Telnet IRC, WAIS, Archie, Gopher, CRL's vast local archive of PC, Mac and UNIX software, plus 24 hour customer support for only $17.50 a month. There are no hourly connect or usage charges, so stay on as long as you like!

To receive additional information use the dialup below (login:guest)
or contact CRL for your dedicated line, dialup, or custom IP service needs.

For free information call:
Voice: 415-837-5300
DIAL-UPS: 213-236-9944
714-517-6700
E-MAIL: info@crl.com

Personal account paid by Visa/M.C. $19.50 Init. Fee

CRL
WORLWIDE NETWORK CONNECTIVITY

M.I.G.
COMPUTER SYSTEMS

M.I.G. P5 PCI SYSTEM

P5 90MHz $1925 | **P5 66MHz $1725** | **P5 60MHz $1625**

- Intel PCI Bus Motherboard
- 15" 1280 x 1024 .28 N.I. SVGA Monitor
- 8MB RAM 70ns
- 1.44 Floppy Drive
- 540MB Enhanced IDE HDD
- PCI Enhanced IDE HDD Controller
- PCI VGA Card w/2MB
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- MIDI Tower Case w/250 Watt

Upgrade 4MB to8MB	$149
Upgrade 8MB to 16MB	$289
Upgrade14" SVGA to 15" SVGA	$95
Upgrade 14" SVGA to 17" SVGA	$380
Install 14.400 Fax/Modem	$69

M.I.G. 486 VL-BUS SYSTEM

Intel 486DX2-66MHz $875 | **Intel 486DX-33MHz $790**

- 486DX2-66MHz VLB w/256K Cache
- 4MB RAM 70ns
- 1.44 Floppy Drive
- 250MB IDE HDD
- Windows Accelerator VLB w/1MB Exp. to 2MB
- 14" 1024 x 768 .28 Super VGA Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Keyboard
- Hi-Resolution Mouse
- Mini Tower Case w/230 Watt

M.I.G. NOTEBOOK SERIES
Novacomm 400 SERIES 486SLC2/50MHz

• 4MB RAM • 120MB Hard Drive • 9.5" Backlit	$950
Upgrade to 200MB Hard Drive	$1050
486DX/33MHz • 4MB RAM • 200MB Hard Drive • Mono VGA	$1250
Upgrade to 340MB Hard Drive	'1355
Upgrade to 486DX2/66 MHz	'1425
Upgrade to Dual Scan Color	'1899

ACTIVE COLOR AVAILABLE!

MISCELLANEOUS

Motherboards

386SX-40MHz w/CPU	$59
386DX-40MHz w/CPU w/128K Cache	89
486SX-33MHz w/CPU w/256K Cache	169
486DX-40MHz w/AMD w/256K Cache	245
486DX2-66MHz w/AMD w/256K Cache	289
486DX2-66MHz w/Intel w/256K Cache	289
P5 60MHz VLB w/256K Cache (No CPU)	215
P5 66MHz VLB w/256K Cache (No CPU)	220
P5 90MHz PCI + VLB OPTI (No CPU)	249
P5 90MHz INTEL	339

Please Call For Pricing On AMI, ASUS, INTEL, MICRONICS, OPTI AND VEGA Motherboards

Video Cards

CIR 5428 VLB	$68
Diamond Stealth 64 VLB w/2MB	189
Diamond Stealth 64 PCI w/2MB	195
ATi Mach 64 VLB w/2MB D	178
ATi Mach 64 PCI w/2MB D	189
Trident 8900 w/1MB	51
Trident 9000 w/512K Cache	33
Trident 9400 VLB	60
S-3 VLB 1MB	65

Please Call For Pricing On All DIAMOND & ATi Models

Tape Back-Ups

Colorado DJ-20	$145
Colorado DJ-30	169
Colorado TJ-20	289
Conner 250MB Internal	137
Conner 250MB External	259
Conner 420MB Internal	175
3MDC 2120 Tape Cartridge	14.95

Please Call For Pricing On DEC, EMERALD Systems, EXABYTE, HEWLETT PACKARD, IOMEGA, MOUNTAIN, SUMMIT, TECMAR, WANGTEK & WANG DAT Tape Back-Up Systems

CPU & Memory
CALL FOR PRICING

Monitors

Arcus 14" Mono	$80
Arcus 14" Mono SVGA	98
Maxview 14" SVGA Non-Interlaced	199
Hi-Com 14" SVGA Non-Interlaced	205
Link 15" SVGA Non-Interlaced	310
CTX 1451	219
CTX 1451 GM-LR	249
CTX 1562 GM	295
CTX 1760 DF	549
CTX 1765 GM	579
ACER 761 17"	569
Viewsonic V15	395
Viewsonic V15E	319
Viewsonic 17	799
Viewsonic V17G	689
Viewsonic V20	1349
Viewsonic V21	1589
MAG DX-15	319
MAG DX-17	579

Please Call For Pricing On ACER, MAG NEC & OPTIQUEST Monitors

Fax Modems

SmartLink 14.4 Internal	$67
SmartLink 14.4 Voice Internal	89
SmartLink 14.4 External	99
SmartLink 19.2 Internal	89
SmartLink 19.2 External	119
US Robotics 14.4 Internal	105
US Robotics 14.4 External	117
US Robotics 28.8 Internal	209
US Robotics 28.8 External	229

Please Call For Pricing on HAYES, SUPRA & ZOOM Fax modems

FDD Drives

NEC 1.2MB	$43
NEC 1.44MB	32
TEAC 1.2MB	45
TEAC 1.44MB	35
TEAC Dual FD	89

HDD Drives

Conner 210MB	$165
Conner 420MB IDE	179
Conner 540MB IDE	209
Samsung 420MB IDE	174
Samsung 560MB IDE	199
Western Digital 730MB IDE	279
Conner 850MB IDE	299
Conner 1.2GB IDE	449
Seagate 1.08GB IDE	444
Seagate 2.0GB SCSI	995
Quantum 2.1GB SCSI	929

Please Call For Pricing on DIGITAL (DEC), HEWLETT PACKARD, MICROPOLIS, MINI-STOR, SEAGATE STORAGE D & QUANTUM HARD DRIVES

CD ROM

Mitsumi 001 (2x) Dual Spin	$119
NEC 510 SCSI (3x) Triple Spin	259
NEC 4xi (4x) Quad Spin	459
Panasonic 563 Dual Spin	117
Toshiba 3501 SCSI Quad Spin	289
4 Plextor SCSI II Quad Spin	425
TEAC Quad Spin	245
14 CD Titles	45
Creative Lab Discovery CD 16 Kit	249

Please Call For Pricing on new 4x CD ROM's

Keyboards

Focus 2001	$32
Focus 6000	21
Focus 9000	48
Fujitsu 4700	38
Syncan 101	16
Honeywell 101 (3yr. Warranty)	33
Keytronics KT2000 101	28

Control Cards

Super IDE I/O	$13
Super IDE I/O VLB	19
Hi-Serial I/O VLB w/IDE	49
PCI IDE	29
PCI SCSI II	69

Please Call For Pricing on ADAPTEC Control Cards - all models

Sound Card

Blaster 16 Value	$87
Blaster 16 MCD OEM	79
Blaster 16 MCD	129
Blaster 16 MCD ASP	167
Blaster SCSI OEM	99
Blaster 16 SCSI	149
Blaster 16 SCSI/ASP	199
Media Magic	69

Please Call For Pricing On ATI, AZTECH LABS, CARDINAL, DIAMOND, LOGITECH, ROLAND, SIGMA DESIGNS & TURTLE BEACH SOUND PRODUCTS

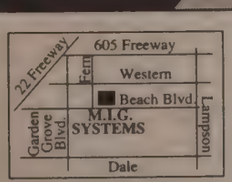
Printers

HP 540	$279
HP 560C	449
HP 4L	625

Please Call For Pricing On All EPSON, OKIDATA, CANON & PANASONIC Printers

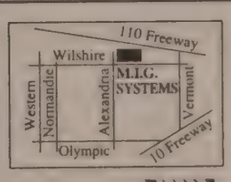
Mouse

Z-Nix Mouse	$8
Microsoft Mouse	29



O.C. OFFICE
8261 Garden Grove Blvd., Garden Grove, CA 92644
TEL: 714-638-7808
FAX: 714-638-7804

L.A. OFFICE
3377 Wilshire Blvd., Suite 103, Los Angeles, CA 90010
TEL: 213-427-1880
FAX: 213-427-1885



HOURS: Monday thru Friday 9:00 a.m. to 7:00 p.m.
Saturday 10:00 a.m. to 4:00 p.m.

All Accessories Also Available. We Deliver w/in a 25 Mile Radius When Purchasing a System!
We Honor Government, Corporate & School PO's!
Not responsible for typographical errors. Prices subject to change w/out notice. All prices based on cash discount. 2% charge for credit card use.

NOVELL.

Online Services

Life In The Online Fishbowl: CompuServe, Unisys, And .GIF

BY KATHLEEN CREIGHTON

Unlike most businesses, which are able to keep their bad publicity under wraps, at least for a while, online services operate in a fishbowl of customers with access to each other. The nature of life online is that online service customers not only spread the word about the service right there under the service's nose, but also migrate to other online venues, including Usenet and local BBSes, to make sure bad news travels fast.

From a business standpoint, this fact of life online has an interesting effect. The most responsive, straightforward, and honest businesses are able to maintain the respect and patronage of their customers, even in the worst of times. Secrecy or manipulation of the facts is always a recipe for public relations disaster.

CompuServe was recently faced with this when word got out to the online populace that the graphic image file format (.GIF) that CompuServe (CIS) has promoted over the years was now going to be "subject to royalty."

In the online fishbowl, the most responsive, straightforward and honest businesses are able to maintain the respect and patronage of their customers, even in the worst of times.

A Short History Of .GIF

Before I continue with the saga of the ".GIF royalty" story, let me digress to explain what .GIF files are and why this has gotten so much attention.

CompuServe promoted .GIF by making it the standard graphics file format on CIS. Because of the volume of CIS .GIF files, this encouraged others who were storing graphics and offering them for download to stay with that format, and it ultimately became the de facto graphics file format for upload/download graphics. This means that if you created a .PCX graphics file with PC Paintbrush software and wanted to share it online, you'd first want to convert the file to .GIF format because people didn't necessarily have software to read .PCX files, but everyone had .GIF viewing software.

.GIF file creation uses a technique called "LZW" (stands for the authors' initials) to create a smaller file from the large, original graphic. This is important, because a smaller file will take up less storage space, and file uploading/downloading will be cheaper on any online service which charges access time (or by toll call). Unisys holds the patent on the compression algorithm, or file compression method, for .GIF.

Unisys and CompuServe reached an agreement regarding payment of royalties for .GIF software, but somehow this agreement was only recently made public.

And The Rumor Mill Goes Wild...

When this information got out, it quite literally happened that CompuServe executives were notified by someone online that CIS had to get someone "out front" immediately to explain the situation. [See cover story for more.]

Fur flew; the executives and public relations department at CompuServe broadcast an explanation online, and not just on CompuServe itself. By doing this, CompuServe at least had a fighting chance of heading off rumors and bad online publicity. By the next day, people who had been watching this story unfold had a better grasp of what the "royalty" discussion really meant.

But that was just the first part of the problem. The big commercial online services, with their monolithic, faceless corporate owners (CompuServe is owned by H&R Block), are more often than not the objects of disdain.

A story like ".GIF is subject to royalty" has the potential of living on for years. Anyone who doubts this might want to start a topic somewhere about "Prodigy can read its users' hard drives" and see what happens. That story has been circulating since 1988. In a way, the .GIF story might even be worse, because .GIF file collectors (and there are tens of thousands of them) border on an almost fanatical obsession with having more.

Questions And Answers

In the interest of heading off misinformation, Tim Oren agreed to answer questions that occasional .GIF file users might have.

Did CIS know that there would be a patent conflict when it started promoting .GIF as the standard graphics file format? Or is this an attempt by CIS to get rich off the royalty fees?

The developers of .GIF did not know the LZW technique was patented. It was found in a literature search of open sources, and though a patent was in the process of being obtained when the original publication was made, there was no disclosure of this. The developers used what they believed to be a public domain technique.

How come Unisys can go back to past years and now claim royalties? Don't they have to protect their patent by defending it all along?

A patent is good for seventeen years from the date of issue. A patent doesn't require the same kind of defense a trademark requires (that is, constant supervision of who's using it). Claiming past royalties is their right.

I have many .GIF files. What does this mean to me? Can I still upload/download them to CIS/BBSes and other systems?

Yes. This whole affair has no effect on end-users of .GIF. You can have as many .GIFs and .GIF tools as you want. This is a problem for the developers of graphics

COMMITMENT TO EXCELLENCE THROUGH PERSONAL ATTENTION!

PENTIUM 90Mhz
Multimedia System

- INTEL Pentium-90 CPU
- ZIF Socket CPU Cooling Fan
- 4PCI, 4ISA 256K Cache
- 8MB Memory (To 128MB)
- 1.05GB IDE Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced Controller
- PCI S3 VGA Card w/2MB
- 2 Hi-Speed Serial Ports
- 1 Hi-Speed Parallel Port
- 101 Keyboard, Hi-Res Mouse
- 17" MAG SVGA Monitor
- Full Size Tower Case
- Teac Quad Speed CD-ROM
- Sound Blaster 16-bit Sound Card
- 14 CD-Titles
- 80W Stereo Speaker

$ 2829

486DX2-66 VLB
Multimedia System

- INTEL 486DX2-66 CPU w/Fan
- ZIF Socket 256K Cache
- 8MB Memory (To 128MB)
- 540MB Hard Drive
- 1.44MB Floppy Drive
- 32-bit VLB SVGA Card w/1MB
- 32-bit VLB HD/FD Controller
- 2 Hi-Speed Serial Ports
- 1 Hi-Speed Parallel Port
- 101 Keyboard, Hi-Res Mouse
- 14" SVGA Monitor
- Mini Tower Case
- Double Speed CD-ROM
- Sound Blaster 16-bit Sound Card
- 14 CD-Titles
- 80W Stereo Speaker

$ 1399

OKIDATA OL800

- 8 Pages/Minute
- 26 Internal Fonts
- Paper Tray & Toner

$ 495

MPEG CARD

- Call For MPEG CD-Title

$ 215

PENTIUM 60/90Mhz
PCI VLB System

- INTEL Pentium CPU
- ZIF Socket CPU Cooling Fan
- 4PCI, 4ISA, 2VLB 256K Cache
- 8MB Memory (To 128MB)
- 540MB Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced Controller
- PCI S3 VGA Card w/1MB
- 2 Hi-Speed Serial Ports
- 1 Hi-Speed Parallel Port
- 101 Keyboard, Hi-Res Mouse
- Mid Size Tower Case
- 15" SVGA Monitor

P-60.....$ 1629

P-90.....$ 1829

486DX2-66 VLB
Turbo System

- INTEL 486DX2-66 CPU w/Fan
- ZIF Socket 256K Cache
- 4MB Memory (To 128MB)
- 420MB Hard Drive
- 1.44MB Floppy Drive
- 32-bit VLB SVGA Card w/1MB
- 32-bit VLB HD/FD Controller
- 2 Hi-Speed Serial Ports
- 1 Hi-Speed Parallel Port
- 101 Keyboard, Hi-Res Mouse
- 14" N-I .28 (1024X768) Monitor
- Mini Tower Case

$ 959

IBM 486-66
System

- IBM 486SLC2-66 VLB CPU
- 128K Cache w/Math-Co
- 4MB Memory
- 420MB Hard Drive
- 1.44MB Floppy Drive
- 32-bit VLB SVGA Card w/1MB
- 32-bit VLB HD/FD Controller
- 2 S, 1P, 1G Port
- 101 Keyboard, Hi-Res Mouse
- 14" N-I .28 (1024X768) Monitor
- Mini Tower Case

$ 859

- **Custom Configuration - Our Specialty**

C.S. SOURCE

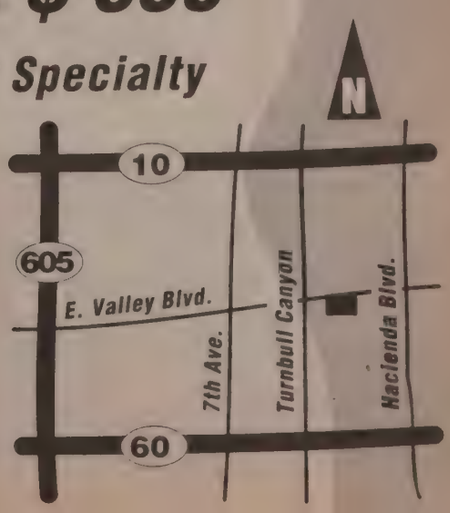
15338 E. Valley Blvd.,
City Of Industry, CA 91746
Fax: (818) 330-6807

Bus. Hrs.:
Mon.-Fri. (9:00AM-6:00PM)
Sat. (10:00AM-4:00PM)

818-336-2243

- One Year Parts Labor Warranty
- Prices Subject To Change Without Notice
- We Take:

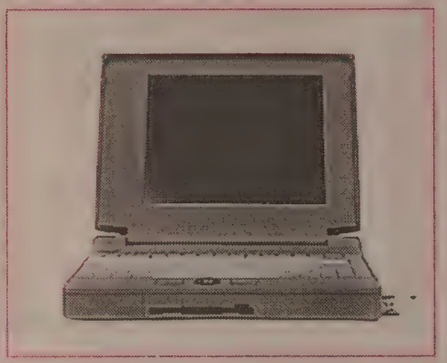
VISA MasterCard



NOTEBOOK EXPRESS

AAPOGEE CD5000

- Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32 MB Max.)
- 250MB-800MB Hard Disk
- 2.5" 1.44MB Floppy
- PCMCIA Type II & III
- Dual Speed CD ROM
- 16 Bit Stereo Sound
- LB Video w/1MB
- Versa Point Mouse
- 12 CD Titles Bundle
- DOS or Windows Package



AAPOGEE MN3100

- Mono/Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32 MB Max.)
- 250MB-800MB Hard Disk
- 2.5" 1.44MB Floppy
- PCMCIA Type II & III
- Battery Overcharge Protection
- Carrying Case
- Integrated Trackball
- DOS or Windows Package

AAPOGEE MD4000

- Mono/Dual Scan/TFT LCD Display
- 486DX2-50 to DX4-100
- 4MB RAM (32MB Max.)
- Removable 250MB-800MBHDD
- Removable 1.44MB FDD
- PCMCIA Type II & III
- Local Bus Video Display w/1MB RAM
- 16 Bit Stereo Sound
- Track Point Mousing
- DOS or Windows Package

AAPOGEE
NOTEBOOKS OF THE FUTURE

CALL FOR THE LOWEST CURRENT PRICES!

NOTEBOOK EXPRESS SERVICE

UPGRADES
REPAIR
MEMORY
HARD DRIVE

TRADE-IN/CONSIGNMENT PROGRAM CALL FOR DETAILS!

72 HOUR TURNAROUND SERVICE TIME Subject to parts, model & availability

PCMCIA PRODUCTS

- Hard Drives
- Fax/Modems
- Ethernet Cards
- SRAM Cards
- FLASH Cards
- ATA Disk Cards

ACCESSORIES

- Docking Station
- Auto Adaptor
- Battery Pack
- External Battery Charger
- Trackball
- AC Adaptor
- Carrying Case

★ ★ ★ ★ ★
AMERICAN INSIGHT

Financing & Leasing Plans Available. Call for Details.
VISA MasterCard
OPEN SATURDAYS 10:00-4:00

600 Monterey Pass Road, Monterey Park, CA 91754
Tel (818) 316-8680 Fax (818) 300-0981

tools, or for some providers of online services, such as CIS, America Online, and the World Wide Web (on the Internet), but not for you. Keep your files, and send them where you please.

I call a BBS that has thousands of .GIF files. What does this mean to the BBS operator? Will s/he no longer be able to offer these files?

Again, simply having files is not a problem, nor is making them available for others. If your BBS operator has provided a special software program that decompresses .GIF, or has a .GIF encoder built into the BBS server, there might be a problem for him or her, but not for the end-user.

If the BBS does use LZW in .GIF in either of these ways, then the operator might need a license from Unisys if it's a homebrew; otherwise the responsibility is on the provider of the BBS software and/or server technology.

What about BBSes that are primarily .GIF collections and charge money for subscriptions? Does this mean that they're out of business?

Same answer as above. If the service includes providing or operating .GIF encoders/decoders, then the BBS or its technology vendor may need to seek a license. If the users and server just store and fetch .GIFs, there should be no problem.

I scanned in some files and made .GIF images out of them. I'd like to make those files available on Usenet. Can I? Under what circumstances?

Yes, you may. Usenet just carries bulk transmissions. Transmitting a .GIF is not a problem, because the binary is a product of operating the LZW "invention"—it does not embody the invention, which is the test for patent infringement.

I am designing my own World Wide Web home page and I have a .GIF image I'd like to use in it. What does this mean to me?

Same as above. A Web page is simply a repository of data. Web browser vendors may have to seek a license from Unisys, but the end-user of either client or server is fine.

I paid a Web page designer quite a lot of money to design a home page for my business, and it does include some .GIF images. Do I have to have the page redesigned? What exactly do I have to do?

Nothing... .GIFs are not contraband, or taxable.

If CompuServe and the World Wide Web and graphics communities work together to alter .GIF to avoid the Unisys LZW patent, then you may end up wanting to convert your .GIFs sometime in the future, if we can add some useful features during that change (such as 24-bit support, for instance). But you can take your time and see what happens. You certainly don't need to pay your designer again.

What if I'm still confused over whether I need an LZW license or have some liability risk?

Talk to your company's corporate counsel or consult a qualified intellectual property attorney. CompuServe may not be making any money off this, but the lawyers will...■

Late-Breaking GIF News

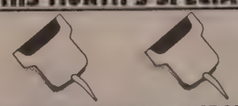
Over the past two weeks, there has been considerable discussion related to the .GIF graphics format specification,

continued on page 195

COMPUTER LIQUIDATION CENTER
714/895-5802
FAX: 714/897-9498

UP TO 75% OFF SUGGESTED RETAIL

THIS MONTH'S SPECIAL!



BLOWOUT MODEL 256 GRAY SCALE SCANNERS
DEXXA Scanner (Made by Logitech)
256 Gray Scale
4 Inch Wide, 400 DPI
Includes: Gray Touch & Fototouch
Supports DOS & Windows
Qty. 1.....$49.95
Qty. 50+.....$39.95

LOGITECH SCANMAN MODEL 256 TRUE GRAY SCALE SCANNER
√ 4" Wide, 400 DPI
√ Fototouch Image Software
√ Autostitch For Automatic Full Page Scanning!
$95

End Users:	Comp USA, Fry's, Micro City Prices	OUR PRICE
Trackball Stationary	~~77~~	55
(High Performance Mouseman)		
Trackball Portable	~~77~~	15
Logitech First Mouse	~~39~~	25
Logitech Mouseman	~~69~~	35
Logitech 3 Button Serial	~~29~~	15
Logitech 2 Button PS/Serial	~~24~~	12
Logitech Bus Mouse	~~99~~	45
Logitech Mouseman Cordless	~~89~~	59.95

AST

AST NOTEBOOKS
• 486/25 PASSIVE COLOR
4 Meg RAM, 200 Meg HD
2 PCMCI Slots, DOS & Windows $1395
• 486/33 ACTIVE COLOR
4 Meg RAM, 200 Meg HD
2 PCMCI Slots, DOS & Windows $2195

AST PARTS:
4 Meg RAM For Premium Exec/Power Exec...$198/195
Battery Premium Exec/Power Exec...$35/65
Keyboard Premium Exec/Power Exec...$35
AC Adapter...$75
External Battery Charger...$35
Trackball Power Exec...$45
Fax Modem S/R Premium Exec...$95
PCMCI Power Exec 24/96...$75
SVGA N.I. Color Monitor, .28...$225
AST Docking Station For Power Exec Notebook...$295
FOR OTHER AST PARTS PLEASE CALL!

MISCELLANEOUS
US Robotics 2400bd Modem - External...$15
US Robotics 9600bd Modem - External...$55
Toshiba 2400bd Modem - Internal...$10
Toshiba PA 2410U - Battery Pack...$35

SOFTWARE
OS2 2.0...$10
Star Trek (The Screen Saver)...$20
3-D Charts To Go...$10
386 Max Version 6...$20
Postscript Value Pack...$30
Form Tool...$20
Intermission...$10
Nodevision...$10
Netware Lite V1.1Dr. Dos 6.0...$10
Smartcom...$20
Rooms for Windows...$10
Tempra Pro...$20
Logitech Catchword Pro...$75
(OCR Package for Logitech Scanners)
Carrying Case for Notebook & Printer Both...$20

YOUR #1 AST SPARE PARTS DISTRIBUTOR IN SOUTHERN CALIFORNIA

To Order, Please CALL in Advance. We Accept Will Call Only. We Will Gladly Ship All Orders To You. Thank You.
5332 Industrial Dr. Huntington Beach, CA 92649
HOURS: M–F 9 a.m. to 5 p.m.
Prices & Availability Subject To Change.

TOTAL INTERNET

28.8 (v.34) MODEMS
Unlimited! $14.95/mo.

- Unlimited access - no hourly charges!
- Access from virtually any computer and modem. No special software!
- E-Mail, Gopher, FTP, Telnet, WAIS, IRC, MUDs, and much more!
- Access to all UseNet news groups.
- LYNX text-based WWW browser.

PPP/SLIP - from $9.95/mo.

- 5 free hours per month for $9.95!
- 30 free hours per month for $24.95!
- Free add-on shell access for 60 days (keep it for just $4.95 per month)!
- Add your own personal WWW Home Page for just $4.95/mo.
- Dial-up network connection lets your computer be a node on the Internet!
- Run the latest 'point and click' GUI Internet programs like MOSAIC!
- Internet starter kit with tutorial book and complete PPP/SLIP software available at our cost.
- Our FTP site has ALL the latest Internet software for PCs and Macs.

Sign Up Online Now !
For Shell or PPP/SLIP service dial 714.778.8400 (n81):
login: guest - password: newuser

Local Dial-Up Access
North & South Orange County, Inland Empire, East LA County, and More Coming Soon...
714, 909, 818, 213, 310
Call Delta For A Local Number Near You.

Free Software*
Pre-Configured, Self-Installing, PPP/SLIP Internet Software Suite, including TCP/IP and MOSAIC NetScape.

Commercial WWW HomePage Hosting and Consulting Services !!!
Delta Internet Services' offers a complete line of commercial WWW hosting and consulting services - from turn-key solutions, personalized training, market research, presence development, to 'do-it-yourself.'
WWW HomePage from $49.95/mo.

WorldWideWeb MOSAIC

Dedicated Internet access - leased-line to T1 and nation-wide frame relay. Domain Name Service, News feed, UUCP, and domain name registration. Customized Internet projects: newsletters, mailings, research. WAN and LAN Network consulting - site management. Licensed site cabling and equipment installation.

▲ DELTA INTERNET SERVICES...
Voice: 714.778.0370 ~ FAX: 714.778.1064 ~ http://www.deltanet.com
E-Mail, Automated Response - info@deltanet.com
E-Mail, Human Response - sales@deltanet.com
*Includes freeware and shareware.

Web Page Listings

Looking for beaches to Netsurf? Announcing MicroTimes' new listing of World Wide Web pages. Herewith is an assortment of cool, interesting, and informative Web sites to tickle your fancy and stimulate your mind.

BEST INTERNET COMMUNICATIONS, INC
http://www.best.com Internet service provider information. [Exp. #138.]

BOB BICKFORD'S HOME PAGE
http://www.well.com/Community/rab/index.html The still-evolving home page of Bob Bickford, Professional Wild-Eyed Visionary. [Exp. #138.]

THE CALIFORNIA LIBERTARIAN PARTY
http://www.lp.org/lp/ca/lpc.html [Exp. #138.]

COOLWARE'S PLACE ON THE INTERNET
http://none.coolware.com/ Coolware hosts *Good Medicine* Magazine and the electronic Job Guide. [Exp. #138.]

THE ELECTRONIC GOURMET GUIDE
http://www.deltanet.com/2way/egg *The eGG* is the Internet's first full-color food magazine featuring interviews, articles, recipes, columns, news, and links. [Exp. #138.]

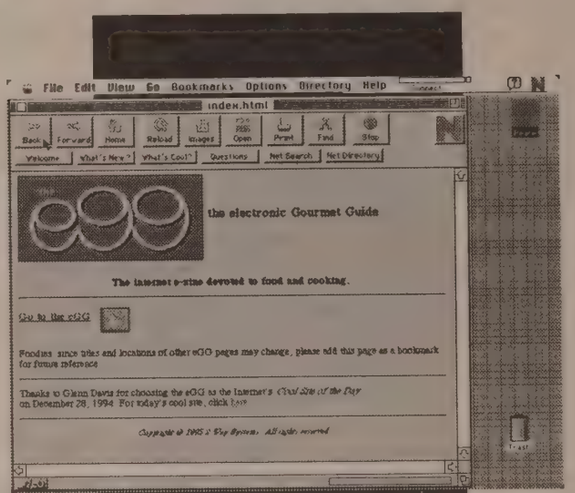
FIRST VIRTUAL
http://www.fv.com/access/by-seller/Internet_Info "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC. [Exp. #138.]

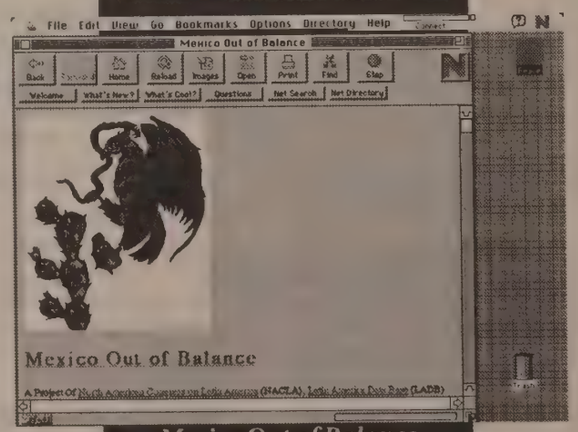
FOCUS ON AFRICA
http://login.eunet.no/~presno/sample4.html Connectivity issues, sources of information about Africa for various application (news, Web, and gopher servers). [Exp. #138.]

FUTURE NEW$
http://futurenews.com/wall-street Newsstand focused exclusively on forecasting Wall Street and global financial markets. [Exp. #138.]

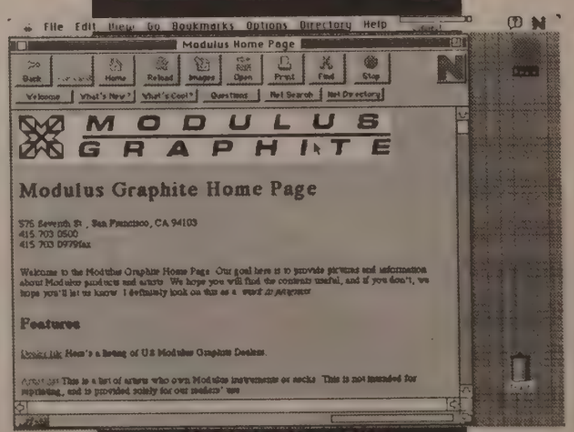
THE HONG KONG BUSINESS DIRECTORY
http://FarEast.Com/HongKong/directory.html Source products, find manufacturers, locate importers and exporters, find hotels, services, suppliers, buyers, even individuals in Hong Kong. [Exp. #138.]

THE INSTITUTE FOR GLOBAL COMMUNICATIONS PROGRESSIVE DIRECTORY
http://www.igc.apc.org [Exp. #138.]


File Edit View Go Bookmarks Options Directory Help
index.html
the electronic Gourmet Guide
The Internet e-zine devoted to food and cooking.
The electronic Gourmet Guide



Mexico Out of Balance



Modulus Graphite

INTERNAL REVENUE SERVICE
http://www.ustreas.gov/treasury/bureaus/irs/irs.html Includes some tax forms, FAQ, where to file, where to get help. [Exp. #138.]

INTERNOTES
http://www.tbo.com/notes.html [Exp. #138.]

THE LIBERTARIAN PARTY, AMERICA'S THIRD PARTY
http://www.lp.org/lp/ [Exp. #138.]

MAKIN' WAVES STUDIO
http://cyberzine.org/html/Waves/wavepage.html Aussie-style humor abounds, complete with free .wav sound files for download. Commercial enquiries welcome. [Exp. #138.]

MEXICO OUT OF BALANCE
http://www.igc.apc.org/nacla/mexico.html Hard-to-find, in-depth information and analysis concerning political, economic, labor, and trade issues in Mexico. [Exp. #138.]

MODULUS GRAPHITE
http://www.dnai.com/~modulus Catalog of high-end basses and guitars. [Exp. #138.]

THE NORTH POLE
http://northpole.net Browse the North Pole; read messages from Santa, his elves, the reindeer; North Pole weather reports. [Exp. #138.]

OPENMARKET
http://directory.net/netinfo "New on the Net" report: includes all noteworthy registrations of commercial domains registered with InterNIC. [Exp. #138.]

RANDY KSAR'S HOME PAGE
http://www.mvhs.edu/~rksar Gives links and documents to those in need of a quick overview of the Web. Also offers Web services. [Exp. #138.]

THE SAN FRANCISCO NETWORK
http://www.SFnet Growing collection of Bay Area databases and newsletters including restaurants, wineries, entertainment, and commercial locations. [Exp. #138.]

THE SHAW FESTIVAL
http://www.cyberplex.com/CyberPlex/Arts/Shaw/Shaw.html Information about shows currently being performed by the only company that specializes in plays written during G.B. Shaw's lifetime. [Exp. #138.]

WHY WAIT

for Windows95? Connect your PC to the Internet now.

DirectNet, your personal and professional connection to the Internet is ready for you today. With the computer you already have and with software available now, you can effortlessly take advantage of all the Internet has to offer. Correspond with friends or associates around the world via e-mail, browse the World Wide Web, research thousands of information sources instantly and download software with just a few clicks of your mouse.

Call DirectNet today and let us put the power of the Internet to work for you, at speeds you never thought possible and at prices that will make you wonder what you've been waiting for!

DIRECT NET

3333 Wilshire Blvd., Suite 607, Los Angeles, CA 90010
http://www.directnet.com

213. 383. 3144

Personal and business accounts available now!

TRY THE

INTERNET

Free!

800 99-REALM

1 WEEK FREE TRIAL ACCOUNT

Get a 1 week no obligation, full access trial account right now. Dial in and log in as 'new'. Select option 2 "One week free trial" from the menu. Surf the Internet free for a full week!

YEARLY DISCOUNT

Pay for 1 year of any service in advance and get 2 months for

INDIVIDUALS

DIAL-UP ACCESS

SHELL (BASIC)
180 HOURS / MONTH FREE, $1/HR THEREAFTER. UNLIMITED EMAIL AND NEWS ACCESS. $15/MONTH

SHELL (FULL)
180 HOURS / MONTH FREE, $1/HR THEREAFTER. NEWS, MAIL, TELNET, FTP, WWW, GOPHER, & EVERYTHING ELSE. $25/MONTH

SLIP/PPP
120 HOURS / MONTH FREE, $2/HR THEREAFTER. RUN MOSAIC, NETSCAPE, AND OTHER GRAPHICALLY BASED INTERNET TOOLS RIGHT ON YOUR COMPUTER! WE PROVIDE FREE SLIP/PPP SOFTWARE FOR YOUR PC OR MAC. **BONUS** — INCLUDES A FREE FULL SHELL ACCOUNT WITH ADDITIONAL 180 HOURS / MONTH FOR A TOTAL OF 300 FREE HOURS / MONTH! $35/MONTH

BUSINESSES

DEDICATED CONNECTIONS

CONNECT EVERY USER ON YOUR LAN / WAN DIRECTLY TO THE INTERNET WITH A DEDICATED CONNECTION - 56K THROUGH T3 AVAILABLE STARTING AT $300 / MONTH. ENJOY EMAIL CONNECTIVITY TO THE INTERNET PLUS A WHOLE HOST OF OTHER BENEFITS AT A FIXED MONTHLY COST.

INFORMATION SERVERS

MAKE YOUR COMPANY'S PRODUCTS / SERVICES AVAILABLE OVER THE INTERNET WITH A NETSCAPE / MOSAIC / WWW SERVER, FTP SERVER, OR GOPHER SERVER. (OR ALL 3!)

CUSTOM CONSULTING

AVAILABLE FOR BUSINESSES WITH SPECIALIZED NEEDS.

LOCAL DIAL-UP ACCESS NUMBERS
(714) 377-9784
(714) 261-5201
(909) 222-2204
(COMING SOON - 213, 310, 805)

REALM
INTERNET SYSTEMS

REALM INTERNET SYSTEMS
3990 WESTERLY PLACE, SUITE 290
NEWPORT BEACH, CA 92660
INFO: INFO@REALM.NET
SALES: SALES@REALM.NET

(C)1995 REALM COMPUTATION INTERNATIONAL. ALL TRADEMARKS ARE PROPERTY OF THEIR RESPECTIVE OWNERS

SRMC SPIDER WEB

http://sweb.srmc.com/ Internet business service provider: from 28.8K IP dial-up or dedicated to 56K, Fractional T1, and T1 high-speed connections. [Exp. #138.]

STAR TREK: VOYAGER

http://voyager.paramount.com Latest Web site by Paramount promotes new Star Trek show and connects studio with the fans. [Exp. #138.]

TV NET

http://tvnet.com/TVnet.html TV Net provides information on broadcast/cable TV stations throughout the US and the world. [Exp. #138.]

UNIFORM CAPITAL ACCESS NETWORK

http://www.ucan.com/ucan/ Offers investors and entrepreneurs the opportunity to explore business prospects. [Exp. #138.]

FREE WEB LISTINGS!*

Take this opportunity to list your Web home page *FREE*. Just fill out this form and mail it to *Web Listing, 3470 Buskirk Ave., Pleasant Hill, CA 94523; fax to (510)934-3958; email to* microx@well.com .

Home page name: _____

URL (address): _____

15-word description: _____

_____

Please give a contact name and voice phone number or email address, for internal purposes only:

Contact name: _____

Phone number: _____

email address: _____

* EDITORS RESERVE THE RIGHT TO SELECT LISTINGS ON A SPACE AVAILABLE BASIS AND EDIT THOSE LISTINGS AS NEEDED.

TOSHIBA

WHOLESALE PRICES TO THE PUBLIC

T1910/200
- 486/33SL
- 4 MB 200 HD

$1199

T1910CS/200
- COLOR
- MOUSE & WINDOWS

$1635

T1960CS/200
- 486 DX2/50
- COLOR

$2065
CS/320 . . . . .$2135

T1960CT/200
- ACTIVE COLOR
- MOUSE & WINDOWS

$2430
CT/320 . . . .$2585

T2400CS/250
- 486 DX2/50
- 2 PCMCIA & SCSI
- COLOR **$2285**

CS/320 . . . . .$2430

T2400CT/250
- ACTIVE COLOR
- ACCUPOINT

$2735
CT/320 . . . . .$2975

T3400CT/250
- ACTIVE COLOR
- 486SX/33

$1850

T4900CT/810
- 10.5" ACTIVE COLOR
- PENTIUM

$6695 NEW MODEL!!

HEWLETT PACKARD

DESKJET/ DESKWRITER 320 BUNDLE $339
DESKJET/ DESKWRITER 540 . . . . . .$269
LASERJET 4+ $1345
LASERJET 4V $1835

ACCESSORIES

TOSHIBA 14.4/14.4 PCMCIA $189
MEGAHERTZ X JACK $199
4 MB UPGRADE $230
8 MB UPGRADE $425
ALL TOSHIBA ACCESSORIES DISCOUNTED!!

• All prices listed are cash discounted • Not responsible for typographical errors • Prices subject to change without notice

General Software

MON - FRI
8:30 - 5:00
WE WANT YOUR TRADE-INS!

(SALES) 818/349-7758
Authorized Sales & Service : TOSHIBA
Service For: HEWLETT PACKARD
APPLE & COMPAQ

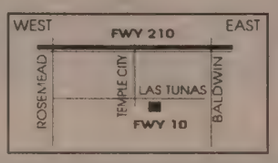
VISA MasterCard

8635 CREBS AVE./NORTHRIDGE, CA 91324

Symphony COMPUTERS™

9620 E. LAS TUNAS DR.
TEMPLE CITY, CA 91780
818.309.9672

AD #941104



HIGHEST QUALITY
FINANCING AVAILABLE
*2 YEARS LIMITED PARTS WARRANTY

* WARRANTY APPLIED TO INFINITY-2000™ SYSTEM ONLY
Please call store for latest details

Prices, Specifications, Terms & Conditions are subject to change without notice. Not responsible for Typographics errors.

INFINITY 2000™
386DX-40MHz

- Motherboard w/ CPU
- 128K Cache Ram
- 4MB RAM
- NEC 1.4MB Drive
- 210MB IDE HardDrive
- Super VGA Card (16Bits) 512K
- 14" SVGA Color Monitor
- 2 Serials / 1 Parallel / 1 Game Port
- Mini Tower Case w/ Power Supply
- 101 Enhanced Key Board
- Hi-Res. Mouse

SPECIAL $698

INFINITY 2000™
IBM VESA 486-66 SERIES

- 486 IBM Vesa Local Bus MotherBoard
- 486 SLC2-66 Processor
- Math Coprocessor Built In
- 4MB RAM
- NEC 1.4MB Drive
- 210MB IDE HardDrive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- 14" SVGA Color Monitor
- Mini Tower Case w/ Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. Mouse

SPECIAL $798

INFINITY 2000™
VESA LOCAL BUS SERIES

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins)
- Pentium Overdrive P24T socket ready
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 128MB
- NEC 1.4MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- 14" Non-Interlaced SVGA Color Monitor .28
- Medium Tower Case w/230W Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. Mouse

66 MHz
SPECIAL $998

INFINITY 2000™
VESA LOCAL BUS POWER SERIE

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins
- Pentium Overdrive P24T socket ready
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 128MB
- NEC 1.4MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits IDE Controller w/2S/1P/1G
- 14" Non-Interlaced SVGA Color Monitor .28
- Medium Tower Case w/230W Power Supply
- 101 Enhanced Key Board
- Hi-Res. Mouse

DX4-100
SPECIAL $1328

INFINITY 2000™
MULTIMEDIA LOCAL BUS SERIES

486DX2-66

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins)
- Pentium Overdrive P24T Support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- 4MB RAM exp. to 128MB
- NEC 1.4 MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- 14" Non-Interlaced SVGA Color Monitor .28
- Medium Tower Case w/230W Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse
- Sony (Double Speed, 320ms, 300k/s, 64KB/s) Sound blaster 16bits compatible w/Mini Watts speakers
- 14 CD Tittles

66MHz
SPECIAL $1248

INFINITY 2000™
MULTIMEDIA ACTION-G SERIES

486DX2-66

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins)
- Pentium Overdrive P24T Support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB RAM exp. to 128MB**
- NEC 1.4 MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- ***15" Non-Interlaced SVGA Color Monitor .28***
- Medium Tower Case w/230W Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse
- Sony (Double Speed, 320ms, 300k/s, 64KB/s) Sound blaster 16bits compatible w/Mini Watts speakers,
- 14 CD Tittles

66MHz
SPECIAL $1458

INFINITY 2000™
MULTIMEDIA SUPREME SERIES

486DX2-66

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins)
- Pentium Overdrive P24T Support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB RAM exp. to 128MB**
- NEC 1.4MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- ***15" Non-Interlaced SVGA Color Monitor .28***
- Medium Tower Case w/230W Power Supply
- Chicony 101 Enhaneed Key Board
- Hi-Res. mouse
- NEC (Tripple Speed, 195ms, 450k/s), Pro Audio Spectrum 16 bits compatible w/120W speakers
- 14 CD Tittles

66 MHz
SPECIAL $1698

INFINITY 2000™
MULTIMEDIA 4X SERIES

486DX2-66

- 486 Vesa Local Bus MotherBoard (3 Vesa Slots, 72 Pins
- Pentium Overdrive P24T Support
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB RAM exp. to 128MB**
- NEC 1.4MB Drive
- 420MB IDE Hard Drive
- 32 Bits VLB Windows Accelerator w/1MB
- 32 Bits VLB IDE Controller w/2S/1P/1G
- ***15" Non-Interlaced SVGA Color Monitor .28***
- Medium Tower Case w/230W Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse.
- TEAC (Quad Speed, 195MS, 600KB/s Transfer), Sound Blaster 16 MCD w/120W speakers
- 14 CD Tittles

66 MHz
SPECIAL $1798

INFINITY 2000™
486 PCI SERIES

486DX2-66

- 486 PCI MotherBoard
- Pentium Overdrive P24T Socket ready
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB RAM exp. to 128MB**
- NEC 1.4MB Drive
- 420MB IDE Hard Drive
- PCI HDD IDE Controller w/2S,1P,1G
- **PCI Windows Accelerator w/1MB**
- 14" Non-Interlaced SVGA Color Monitor .28
- Mid. Tower Case w/230W Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse

66 MHz
SPECIAL $1298

INFINITY 2000™
PENTIUM PCI SERIES

- Intel 586 Pentium PCI MotherBoard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **8MB RAM exp. to 128MB**
- 1.4MB Drive
- 520MB IDE Hard Drive
- PCI Enhanced IDE HDD Controller
- **2 High Speed Serial (16550) 1 Bi-Directional Parallel Port**
- **ATI Mach 64 PCI Graphic Windows Accelerator w/2MB**
- **15" Non-Interlaced SVGA Color Monitor .28** (FlatScreen, Digital Display & Microprocessor)
- Mid. Tower Case w/Power Supply
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse

60 MHz 90 MHz
SPECIAL $1798 $2098

INFINITY 2000™
PENTIUM PCI EXPRESS SERIES

- Intel 586 Pentium PCI MotherBoard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **16MB RAM exp. to 128MB**
- 1.4MB Drive
- **1 GIG SCSI-2 Hard Drive**
- PCI SCS1-2 HDD Controller
- **2 High Speed Serial (16550) 1 Bi-Directional Parallel Port**
- **15" Non-Interlaced SVGA Color Monitor .28** (FlatScreen, Digital Display & Microprocessor)
- Mid. Tower Case w/ Power Supply
- ATI Mach 64 Graphic Accelerator w/2MB
- Chicony 101 Enhanced Key Board
- Hi-Res. mouse

60 MHz 90 MHz
SPECIAL $2398 $2698

INFINITY 2000™
PENTIUM CAD FINDER SERIE

- Intel 586 Pentium PCI MotherBoard
- Pentium 586 Processor
- Math Coprocessor Built In
- 256K Ultrafast write back cache
- **16MB RAM exp. to 128MB**
- 1.4MB Drive
- **1 G1G WYSE SCSI-3 Hard Drive w/cac**
- **Adaptec 2940 W SCII-3 HDD Controlle**
- ***17" Non-Interlaced Flat Screen SVGA Monitor .28***
- Mid. Tower Case w/ Power Supply
- ATI Mach 64 Graphic Accelerator w/2MB
- 101 Enhanced Key Board
- Hi-Res. mouse

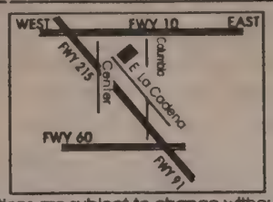
60 MHz 90 MHz
SPECIAL $3098 $3398
w/full Tower case

LOWEST PRICE !

90 DAYS SAME AS CASH O.A.C.

LIFETIME LABOR WARRANTY*

* WARRANTY APPLIED TO INFINITY-2000™ SYSTEM ONLY
Please call store for latest details



Compu-City

570 E. LA CADENA 1-H
RIVERSIDE, CA 92501
909.369.9409

Prices, Specifications, Terms & Conditions are subject to change without notice. Not responsible for Typographics errors.

MOTHERBOARD

386DX-40MHZ W/CPU 128K CACHE	$85.00
IBM 486SLC2-66 W/64K CACHE	165.00
VLB 486DX W/256K	85.00
P5 60/66 W/256K VLB OPTI CHIPSET	215.00
P5 60/66 W/256K CACHE PCI OPTI CHIPSET	195.00
P5 90 W/256K CACHE PCI OPTI CHIPSET	235.00
INTEL 586DX 60/66 PCI MERCURY CHIPSET	265.00
INTEL P5 60/66 W/256K PCI MERCURY CHIPSET	265.00
INTEL P5 90 W/256K PCI NEPTUNE CHIPSET	335.00

SIMMS MEMORY

1MB SIMMS 1X2 70NS	$40.00
1MB SIMMS 1X3 70NS	45.00
4MB SIMMS 1X9 70NS	165.00
4MB SIMMS 72PINS 70NS	160.00
8MB SIMMS 72 PINS 70NS	295.00
16MB SIMMS 72PINS 70NS	495.00

CPU

486DX-33 CYRIX	$145.00
486DX-33 INTEL	165.00
486DX-40 AMD	165.00
486DX2-66 AMD	185.00
486DX2-66 INTEL	225.00
PENTIUM 586-60 INTEL	415.00
PENTIUM 586-66 INTEL	515.00
PENTIUM 586-90 INTEL	625.00

MONITOR

SHAMROCK 14" SRC1451 (1024X768)	$185.00
SHAMROCK 14" 1452 (1024X768) .28 N/I	215.00
KFC 14" 1428G (1024X768) .28N/I	225.00
SHAMROCK 15" SRC1502 (1280X1024) .28N/I	295.00
VIEWSONIC 15" 15EX (1280X1024) .28N/I	385.00
VIEWSONIC 15" 15 (1280X1024) .28N/I	395.00
MAG 15" 15DX15 (1280X1024) .28 N/I	410.00
SONY 15" 15SF (1280X1024) .28N/I	465.00
SHAMROCK 17" SRC1702 (1280X1024) .28N/I	725.00
CTX 17" 1760DF (1280X1024) .28N/I	565.00
KFC 17" 1760DF (1280X1024) .28N/I	610.00
MAG 17" 17DX (1280X1024) .28N/I	595.00
VIEWSONIC 17" 17G (1280X1024) .28N/I	725.00
VIEWSONIC 17" 17 DIGITAL (1600X1280) .27N/I	845.00

VIDEO CARD

TVGA-9000 16BITS W/512K	$35.00
TRIDENT VLB W/1MB	65.00
S3 805 VLB 32BITS W/1MB	72.00
GENOA 8500 VLB W/1MB	95.00
GENOA PHANTOM 32 VLB W/2MB	165.00
GENOA PHANTOM 32 PCI W/2MB	165.00
GENOA PHANTOM 64 PCI W/2MB	195.00
DIAMOND STEALTH 32 VLB W/2MB	145.00
DIAMOND STEALTH 64 VLB W/2MB	285.00
DIAMOND STEALTH 32 PCI W/2MB	285.000
DIAMOND STEALTH 64 PCI W/2MB	285.00
ATI MACH 64 PCI W/2MB	195.00
ATI MACH 64 PCI W/2MB VRAM	265.00
KELVIN 64 VLB W/1MB	145.00
KELVIN 64 PCI W/1MB	165.00

HARD DRIVE

WESTERN DIGITAL 2210 210MB IDE (15MS)	$165.00
WESTERN DIGITAL 2420 420MB IDE (12MS)	185.00
WESTERN DIGITAL 2540 540MB IDE (11MS)	225.00
WESTERN DIGITAL 31000 1 GIG IDE (10MS)	435.00
CONNER 210MB IDE (12MS)	155.00
CONNER 420MB IDE (12MS)	165.00
CONNER 540MB IDE (10MS)	225.00
SAMSUNG 250MB IDE (12MS)	145.00
SAMSUNG 420MB IDE (12MS)	180.00
SAMSUNG 540MB IDE (11MS)	225.00
QUANTUM 10805 1.0GB SCSI (9M5)	545.00
CONNER 21205 2.1GB SCSI (10MS)	1050.00
MICROPOLIS 3936 3.1GB SCSI (12MS)	1875.00
SEGATE 15150N 4.0GB SCSI (8MS)	2385.00

MODEM

SMART ONE 96/48/24 INT	$35
SMART LINK 14.4 INT	65.00
SMART LINK 14.4 INT (W/VOICE)	99.00
US ROBOTIC 14.4 INT	120.00

MOUSE

HIGH RES. MOUSE	$10.00
MICROSOFT MOUSE	35.00
LOGITECH TRACKMAN	85.00

PLUG N GO

U POINT PLUG N GO PORTABLE	$165.00

TAPE BACKUP

CONNER 250MB TAPE BACKUP W/1CART INT	$135.00
COLORADO 250MB TAPE BACKUP INT	165.00

CD ROM

MITSUMI CRMC-FX001D DOUBLE SPIN	$115.00
MITSUMI CRMC-FX001D DOUBLE SPIN (W/INTERFACE)	135.00
PANASONIC CR 562-B DUAL SPIN	140.00
PANASONIC CR 562-B DUAL SPIN(W/INTERFACE)	160.00
NEC CDR-510 SCSI TRIPLE SPIN	255.00
TEAC 4X QUAD SPIN	275.00

SOUND CARD

SOUND 16BITS COMPATIBLE	$65.00
WINSTROM 16 SCSI	95.00
SOUND BLASTER 16 MCD	125.00
SOUND BLASTER 16 MCD ASP	165.00
SOUND BLASTER 16 SCSI-2	155.00
SOUND BLASTER SCSI-2 ASP	205.00
SOUND BLASTER AWE 32	275.00

FLOPPY DRIVE

NEC 1.2MB	$45.00
NEC 1.4MB	35.00

CASE

MINI TOWER CASE W/DIGITAL	$35.00
MID TOWER CASE W/DIGITAL	55.00
FULL TOWER CASE W/DIGITAL	75.00

CONTROLLER CARD

SUPER IDE CONT W/2S, 1P, 1G	$14.00
SUPER IDE VLB CONT W/2S, 1P, 1G	18.00

KEYBOARD

CHICONY 101 ENHANCED K/B	$18.00
FOCUS 2001 ENHANCED K/B	35.00
FOCUS 6000 ENHANCED K/B	35.00
FOCUS 9000 ENHANCED K/B	48.00
FUJITSU 4700 ENHANCED K/B	47.00

PRINTER

HP 520	$279.00
HP 540	285.00
HP 560C	545.00
HP 4L	635.00
HP 4P	918.00
HP 4PLUS	1358.00

SPEAKER

4 WATT SPEAKER	$18.00
120 WATT SPEAKER	65.00

GENISYS MICRO CONCEPTS INT'L

dba ASEAN COMPUTER TECHNOLOGIES, INC.

● 20425 E. VALLEY BLVD. ● WALNUT, CA 91789 ● TEL: (909) 598-2828 FAX: (909) 598-5748 ●

GENISYS 486 "*COLT*" VESA LOCAL BUS SYSTEM

- 486DX2-66 Vesa Local Bus System
- ***4MB*** RAM
- Med Tower Case w/P/S (H)
- 101-Key Enhanced Keyboard
- 1024x768 14" ***.28dp Non-Interlace*** SuperVGA Monitor
- ***32-Bit VLB*** Accl. SVGA Card w/1MB
- ***32-Bit VLB*** IDE Controller
- 2-Serial, 1-Parallel, & 1-Game Ports
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- 3-Button Serial Mouse (MS Compatible)

$955.00

Genisys 486DX2-66 VLB Multi-Media System

- 486DX2-66 Vesa Local Bus System
- ***4MB*** RAM
- Med Tower Case w/P/S (H)
- 101-Key Enhanced Keyboard
- 14" ***.28dp Non-Interlace*** SVGA
- ***32-Bit VLB*** Accl. SVGA Card w/1MB
- ***32-Bit VLB*** IDE Ctrl. w/I/O (2S/1P/1G)
- 2-Serial, 1-Parallel, & 1-Game Ports
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Serial Mouse
- ***2X*** CD ROM Drive, 16-bit Sound Card
- U/W Atlas,Chess3000,Typing
- ***1995 Value Pak***,4W Stereo Speakers

1995 Value Pak: Grolier's Ency. Animals, Multi Games

$1100.00

Genisys Pentium-66 PCI "*STALLION*" System

- ***Intel Pentium*** 66 MHz CPU
- CPU Heat Sink & Cooling Fan
- ***8MB*** RAM Installed w/256K Cache
- Med Tower Case w/P/S (H)
- 101-Key Enchanced Keyboard
- 1024x768 14" ***.28dp Non-Interlace*** SuperVGA Monitor
- ***S3*** PCI Accl. SVGA w/1MB
- PCI IDE HD/FD Ctrl. w/I/O (2S1P1G)
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Serial Mouse

$1500.00

CD ROM Package (Special w/System Purchase)
US/W Atlas, Typing, Chess Master3000, Mini Speakers, 16-Bit Sound Card
w/2X Dual Speed CD ROM Drive $190
w/4X Teac Quad Speed CD ROM Drive $310

Wholesale $$ To The Public
Genisys High Performance Systems are pre-tested a minimum of 72-hrs to ensure maximum quality and reliability

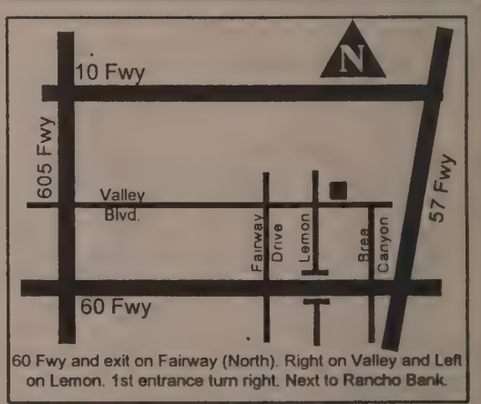
ORDER HOTLINE
SALES: (909) 598-2828
FAX: (909) 598-5748

Gorvernment & University
Purchase Orders & Corp. Acct.
WELCOME
* Delivery & Setup, On-Site Service Available
(Please call for different plans)

System Available in BLACK

Genisys

Office Hours: Mon-Fri 9AM~6PM
Price Subject to Changes Without Notice



60 Fwy and exit on Fairway (North). Right on Valley and Left on Lemon. 1st entrance turn right. Next to Rancho Bank.

We will MEET or BEAT ANYONE's Advertised Price!!
Note: Configuration must be identical.

Multimedia Packages

Sound Blaster Digital School-house Package
Sound Blaster 16, MPC-2 Compliant CD-ROM Drive (300KB/sec, 320ms,Multi-Session Photo CD compatible), Stereo Speakers, CD Software: Grolier Ency., Allie's Playhouse, Four Footed Friends, Cruncher, Peter Pan (Painting Adventure), Speed, 3-D Dinosaur Adventure, Speel It 3, Kid Works, Stradiwackius, Gus Goes to Cybertown, Scooter's Magic Castle, Eagle Eye Mysteries / In London
$259

Sound Blaster Discovery CD-16 Package
Sound Blaster 16, MPC-2 Compliant CD-ROM Drive (300KB/sec, 320ms,Multi-Session Photo CD compatible), Stereo Speakers, CD Software: Grolier Ency., Aldus PhotoStyler, Gallery Effects, Altamira Composer SE, HSC Digital Morph, Kai's Power Tools, Lemmings, Indianapolis 500 - The Simulation, Screen Singer, Creative Ensemble, WaveStudio, Soundo'le, Mosaic, Talking Scheduler
$238

"Pony" 16-Bit Multimedia Kit
Sound Blaster 16-bit Compatible Sound Card (Opti Chip Set), 4W-Mini Speakers, Grolier Ency., Animals, US & World Atlas, ChessMaster3000, Beacon Teaches Typing
w/2X CD ROM Drive $199

Sound Blaster 16 SCSI Multimedia Kit
Creative Lab Sound Blaster 16-Bit SCSI Sound Card, 4W-Mini Speakers, US & World Atlas, ChessMaster3000, Teaches Typing
w/NEC 510 3X (180ms) CD ROM $390
w/Toshiba 3501B 4X CD ROM $450

NEW: Quad Speed Combo Kit
Teac CD55 4X CD ROM (195ms,600KB/sec), Creative Lab Sound Blaster 16 Sound Card
A. 14CD Titles & 115 Watts Speakers or $369
B 4CD Titles & 4 Watts Speakers $299

Installation Available. Please Call for Details!

Genisys Pentium 90 P5 "*MUSTANG*"

- ***Genisys Pentium 90*** System
- ***Intel Pentium*** 90 MHz CPU
- CPU Heat Sink and Cooling Fan
- ***8MB*** RAM and ***256K*** Cache Installed
- Medium Tower Case w/Power Supply
- ***Keytronic*** KT2000 101-Key Enhanced Keyboard
- 14" ***.28dp Non-Interlace Full Screen*** SVGA Monitor
- ***S3*** PCI Accelerator Video Adaptor w/1MB (Exp. to 2MB)
- IDE HD/FD Ctrl w/2-Serial and 1-Parallel Ports
- ***420MB*** IDE Hard Drive
- 3.5" 1.44MB Floppy Drive
- Hi Resolution Mouse

$1680.00

Genisys

Headquarters: *Genisys Micro Concepts Int'l*
20425 E. Valley Blvd.
Walnut, CA 91789
Int'l Branch: *Genisys Ltd., Punane 6, Tallinn, Estonia EE00336*

ПОСЫЛАЕМ КОМПЬЮТЕРЫ В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ
Note: International Quantity Purchases - we can drop ship to Eastern Bloc Locations and Russia.

GENISYS MICRO CONCEPTS INT'L
dba ASEAN COMPUTER TECHNOLOGIES, INC.

• 20425 E. VALLEY BLVD • WALNUT, CALIFORNIA 91789 • TEL: (909) 598-2828 • FAX: (909) 598-5748

FAX: (909) 598-5748
ORDER HOTLINE
(909) 598-2828
TECH SUPPORT:
(909) 598-3498

ПОСЫЛАЕМ КОМПЬЮТЕРЫ В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ

We sell wholesale computer systems & all components. Dropship to Russia/ Baltic regions/ Europe available. Please call for details & qty. discounts for export.

GENISYS *"WORKHORSES"*
HOME & OFFICE MACHINES TO FIT YOUR NEEDS

110V 220V

GENISYS 386SX40	GENISYS 386DX40	GENISYS 486SLC66
• 386 SX-40 M/B w/2MB	• 386 DX40 M/B (128K C) w/4MB RAM	• 66MHz IBM M/B w/MATH-CO,
• MINI TOWER W/P.S.	• MINI TOWER W/P.S.	• 4MB RAM
• 101 ENHANCED K/B	• 101 ENHANCED K/B	• MINI TOWER W/P.S.
• 14" SVGA MONITOR (1024x768)	• 14" SVGA MONITOR (1024x768)	• 101 ENHANCED K/B
• 256K VGA Video Adaptor	• 512K SVGA Video Adaptor	• SVGA MONITOR (1024x768)
• IDE CTRL & 2S/P/GAME	• IDE CTRL & 2S/P/GAME	• 1MB Svga Video Adaptor
• 125 MB IDE HD	• 125MB IDE HD	• IDE CTRL & 2S/P/GAME
• 3.5" 1.44MB FD	• 1.44MB FD	• 125MB IDE HD
• HI-RES MOUSE (MS COMPATIBLE)	• HI-RES MOUSE (MS COMPATIBLE)	• 1.44MB FD
		• HI-RES MOUSE (MS COMPATIBLE)
$559.00	*$680.00*	*$729.00*

* 1995 Special : Upgrade to 125MB to 170/210MB IDE Hard Drive Add ..... $20.00/$30.00

MONTHLY HD SPECIALS

Conner / Quantum 420MB IDE	$169
Conner / Quantum 540MB IDE	$189
Quantum 730MB IDE	$239
Western Digital 1.08GByte IDE	$369
Conner 1.06GByte SCSI	$429
Quantum 2.1GByte SCSI	$899

Call for Volume Discounts

ПОСЫЛАЕМ КОМПЬЮТЕРЫ В ПРИБАЛЬТИКУ И В СТРАНЫ СНГ

CASES W/P.S.

Desktop w/230W p/s 6.5x16.75x17.25"	$40
Mini Tower w/200W p/s Special (*Qty 20+ $29)	$33
Mini Tower w/230W p/s w/digital display 12x16x7.25" (*Qty 20+ $30)	$35
Med Tower HT/H2 w/230W p/s digital display 15x16x7.25" (*Qty 20+ $40)	$43
Med Tower w/230W p/s,digital display 6.5x16.75x17.25" (*qty 20+ $46)	$47
Full Tower w/250W p/s & digital display 24.5x17x7.5"	$65
Full Tower w/250W p/s & dig. disp. w/2Fans	$78
Super Slim Desktop Workstation	Call
Super Tower (File Server), 2 Fans + 10 bays w/300W p.s. w/wheels	$169

BLACK CASES

Mini Tower w/230W p/s & dig. disp. (*qty 20+ $42)	$48
Med Tower w/230W p/s & dig. disp. (*qty 20+$65)	$70
Full Tower w/250W p/s & dig. disp. (*qty 20+ call)	$88
Super Tower (File Server), 2 Fans + 10 bays w/300W p/s/ w/wheels	$189

*Great Prices for Volume/Vars to Bring in the New Year!!

VIDEO DISPLAY

HMC/UMC 18bit w/256K 800x600 VGA	$25.5
OAK 087 1MB Graphics Accl. 1024x768	$52
Trident 9000 SVGA w/512K 1024x768	$38
Trident 8900 SVGA w/1MB 1024x768	$58
Cirrus Logic 5434 1MB PCI (exp.4MB)	$90
Cirrus Logic 5428 1MB VLB Accel(exp. 2MB)	$65
S3 (Stealth 24 compt.) VLB 1MB Accel	$88
Mono Graphic w/Printer port	$15

Diamond Computer

Stealth 24 VLB 1MB	$119
Stealth 64 VLB 1MB/2MB	$140/180
Stealth 64 VLB 2MB VRAM	$279
Viper VLB 2MB	$238
Stealth 32 PCI	$188
Stealth 64 PCI 1MB/2MB DRAM (*Special*)	$129/179
Stealth 64 PCI 2MB/4MB VRAM	$290/420
Viper PCI 2MB	$249

Call for Other Video Display (ATI, #9GXE, Orchid, etc.)

MODEMS + TAPE BACK-UP

Conner Tape Back-up 250MB w/3M tape	$125
Conner Tape Back-up 250MB (Ext.)	Call
Colorado Tape Back-up 250MB	$138
Jumbo Tracker 250/350MB (Ext)	$295/379
Colorado parallel port Tape Back-up	
External Drive Kit KE-09 (no adapter)	$78
Tape Drive Adapter AB-11 (for ext.)	$35
3M Tape Cartridge 2120 UnFormatted	$15
3M Tape Cartridge 2120 UnFormatted (Minimum Purchase 5/Box)	$18.50

9600/24 Voice Fax Modem	$58
14,400 Int. Fax Modem (qty 20+ $49)	$55
14,400 Int. Voice Modem	$65
28,800 Int. Fax Modem (Hayes Compatible)	$130
Intel 14,400 Fax Modem (Ext.) (Special)	$105
U.S. Robotics 14,400 Int/Ext Fax Modem	$99/130
U.S. Robotics 28,800 Internal Fax Modem	$215
U.S. Robotics 28,800 External Fax Modem	$235

MOTHERBOARDS

386 ISA Main Board

386SX-40 w/CPU	$65
386DX-40 w/128K Cache w/CPU (Qty 20+ $80)	$85
386DX w/Intel RapidCAD CPU & Intel RapidCAD Math Coprocessor (Special)	$98

486 VESA Local Bus Main Board

IBM VLB 486SLC2-66 w/Math Coprocessor 64K Cache 30pin	$155
128K Cache 30pin	$175
IBM VLB 486SLC-75MHz Blue-Lightning 256K Cache w/Math Co., Built-in IDE, Hi-Speed I/O, 72-Pin (3-Year Warranty)	$255
QDI/JM Green 486SX/DX VLB+128K Cache (30/72P)	$72
QDI/JM Green 486SX/DX VLB+256K Cache PC Chip ZIF (30/72Pin)	$88
Opti ZIF (30/72Pin)	$90
VEGA 486VLB+256K Cache ZIF (30pin) (USA)	$130
VEGA 486VLB+256K Cache ZIF (72pin) (USA)	$160
486 CPU Heat Sink & Fan	$8

Pentium M/B w/o CPU

Intel "Mercury Chipset" 60/66 PCI w/256K	$285
Intel "Neptune Chipset" 90/100 PCI w/256K built-in IDE+2xHiSpeed+1xParallel	$295
Opti P5-60/66 PCI + VLB w/256K Cache	$175
Opti P5-60/66 PCI + VLB w/512K Cache	$215
Opti P5-90/100 PCI + VLB w/256K Cache	$235
Opti P5-90/100 PCI + VLB w/512K Cache	$275
Opti P5-90/100 PCI + VLB w/256K Cache, built-in IDE+2xHiSpeed+1xParallel	$275
SIS P5-60/66 PCI (256K Cache)	$155
SIS P5-90/100 PCI (256K Cache)	CALL
Pentium CPU Heat Sink & Fan	$13

Please call for current CPU Price $$

H/F CONTROLLERS

VLB Super IDE ctrl. w/I/O (Qty 20+ $15)	$18
VLB Enhance IDE w/I/O (4HD or 2H/2CD)	$25
VLB Enhance Super IDE Ctrl. w/HI-Speed I/O Bi-Directional Parallel Ports, 4HD/2FD	$45
ISA IDE 2H/2F w/Hi-Speed I/O	$33
ISA Super IDE 2H/2F w/AT I/O (Qty 20+ $9.5)	$13
PCI IDE (4HD, Hard Drive Only) (Qty 20+ $20)	$26
PCI IDE HD/FD + I/O	$35
PCI SCSI Ctrl (NCR 810)	$85

PROMISE

Promise ISA IDE w/512K (exp. 8.5MB)	$108
Promise 4030 VLB IDE Cache(exp. 16MB)	$115

ADAPTEC

1522 ISA SCSI / 1522K w/Kit	$75/135
1542C/1542CK+ ISA SCSIw/Kit	$165/245
284Z VLB SCSI H/F w/o Kit / w/Kit	$198/245
2940 PCI SCSI Ctrl / 2940 PCI w/Kit	$199/285

I/O CARDS

High Speed AT I/O (Qty 20+ $20) (16C550 comp., 2 serial/1 parallel ports)	$25
VLB Enhance IDE w/I/O (4HD or 2H/2CD)	$25
Super IDE 2H/2F w/AT I/O (Qty 20+ $9.5)	$13
ISA SuperIDE w/HI-Speed I/O	$33
VLB IDE ctrl. w/I/O (2H/2F,2s,p,g) (qty 20+ $15) w/HI-Speed I/O	$18 $35
Enhance VLB Super IDE Ctrl w/HI-Speed I/O & Bi-Directional Parallel Port (4HD/2FD)	$45
Printer card/Game card	$8/8

KEYBOARDS

BTC 101 Enhance 5339	$20
Keytronic 101 KT2000 (USA)	$35
Fujitsu 4700 101	$45
Focus 2001 w/Dust Cover	$35
Focus 6000 111 Keys w/Calculator (Soft)	$45
Focus 7000 103 Keys w/Trackball	$38
Focus 9000 128 Keys w/Calculator	$58
BLACK ACTI 101 Enh. K/B	$42
BLACK Focus 2001 101 Enh. K/B	$48

MONITORS

ARCUS (Available in 14" & 15" Black Color) / MGC

	Beige	Black
14" 1483A (I) (.39 SVGA 1024x768)	$173	N/A
14" 1488 SVGA I (.28 1024x768) E2E	$190	$235
14" 1458 SVGA NI (.28 1024x768) E2E	$210	$255
15" SVGA NI (.28 1280x1024) F/S	$269	N/A
15" 1586 SVGA NI (.28 1280x1024) F/S Dig	$290	$340

CTX (2-Yr Manufactures Warranty)

1451ES 14" NI (1024x788 .28)	$225
1452GM 15" (NI .28 1024x768)	Call
1562GM 15" (NI .28 1024x768,75Hz LR)	$299
1565GM 15" (NI .28 1024x768, Dig)	$315
1561LR 15" LR NI (1024x768,28 F/S Limited Special)	$275
1765GM 17" Digital NI (1280x1024,.28)	$570

ViewSonic
Authorized Dealer

6E 14" SVGA NI (.26dp, 1024x768)	$245
15G 15" SVGA NI (.28dp)	$369
15 15" SVGA NI (.28dp, Digital, 76Hz) (15PS)	$370
17E 17" SVGA NI (.28dp,1280x1024)	$699
17G 17" SVGA NI (Multi-Freq, .28dp,1280x1024)	$680
17 17" SVGA NI (.27dp, Digital,76Hz,1600X1280)	$780
20G 20" SVGA NI (.28dp,Dig.)	$1199
21 21" SVGA NI (.28dp, Dig., 76Hz)	$1695

SHAMROCK

14" Full SVGA NI (1024x768,.28)	$208
1501 15" FST SVGA NI (1024x768,.28)	$269
1502 15" FST SVGA NI (1024x768,.28) (Dig)	$299

TTL Mono (9-Pin) / VGA Mono (15-Pin VGA)

BTC 12" Amber TTL Mono	$75
14" TTL Mono PW/Amber	$82
14" Mono (B&W) VGA	$99
14" Mono (B&W) SVGA	$105

MULTI MEDIA (CD ROM / SOUND CARDS)

Panasonic 562/3 (2X Speed) CD ROM	$115
Multi CD Interface (Controls Sony/Mitsumi/Panasonic)	$12
NEC 510 (3X Speed) SCSI	$260
Teac Quad (4X Speed, Panasonic Interface)	$229
Toshiba 3501B Quad (4X Speed) CD ROM (SCSI)	$280
Creative Lab Sound Blaster 16 MCD (Controls Mitsumi/Sony/Panasonic/Teac 4X)	$98
w/ASP (Advance Signal Processor)	$185
Creative Lab Sound Blaster 16 SCSI	$130
w/ASP (Advance Signal Processor)	$185
Opti Chip 16-Bit Sound Card (SB16 MCD Compatible) (Great Value)	$75
Misc. Audio Cable (pls. specify CD ROM)	$8
Misc. Data Cable (pls. specify AT/SCSI Bus)	$8

MICE & TRACKBALLS

Leadgen Hi-res Mouse(Serial)	$10
Leadgen Hi-res Mouse (Serial) w/Pad	$12
Logitech Dexxa Hi-res Mouse	$10
Truemouse TX/AX 300 (Serial) w/mouse pad	$15
Truedox Trackball TB300	$36
Microsoft Mouse Serial/Bus	$68/75
BLACK AX300 (Serial) Hi-res Mouse	$22

HARD DISKS/FLOPPY DRIVES

CONNER PERIPHERALS

250MB IDE	Call
420MB IDE	$179
540MB IDE	$210
850MB IDE	Call
1.08Gig SCSI-II	$518
1.08Gig IDE	Call

MAXTOR

540MB IDE	$215

MS

[illegible]	[illegible]

QUANTUM

540MB IDE	$214
640MB SCSI	$249
730MB IDE	$318
1.08Gig SCSI-II	$439
2.0Gig SCSI-II	$929

WESTERN DIGITAL (3-YEAR WARRANTY **)

Caviar 2420 420MB IDE (11ms) **	$189
Caviar 2540 540MB IDE (11ms) **	$229
Caviar 730MB IDE **	$288
Caviar 850MB IDE **	Call
Caviar 1.08Gig IDE **	$419

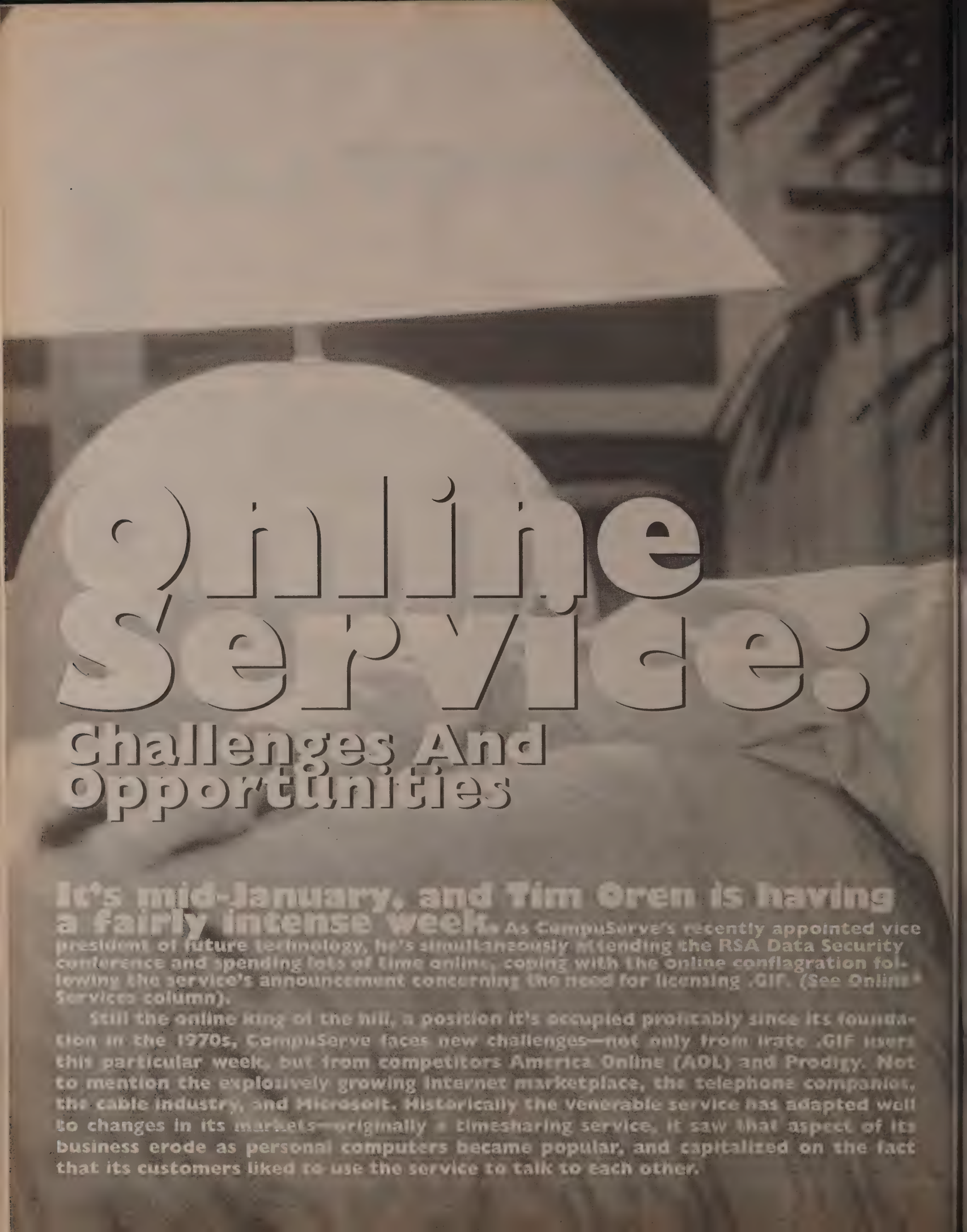
SAMSUNG (2-YEAR WARRANTY)

420MB IDE	$175
540MB IDE (Special)	$189

	1.2	1.44
Teac (Beige)	$41	$51
Teac (Black)	$41	$41
Mitsumi / NEC (Ivory)	$42	$37
Teac FD55B 2-in-1 Combo (1.2+1.44MB)	$90	
1.44 Floppy Drive Kit (Beige/Black)	$30	
Hard Drive 5.25" Mounting Frame	$5	

Minimum order $300 or Qty 10+. Call for Dealer Qty Discounts and other products (CPU's, RAM, P.S., etc) prices.

TERMS:1year warranty on parts & labor. Printers & monitors warranty thru manufacturer. All sales on RAM/CPU's,MONITORS & PRINTERS are final. NO REFUND! All returns are subjected to our approval & must have prior authorization. Return items must be in good condition & in its original packing shipped prepaid & insured. All refunds or credits are less freight & bank charges. All refund items must be returned within 14 days of invoice. There will be a restocking charge of 20% after the 7 days period & within 14 days of invoice. Not responsible for any typographical errors. Price & availability subject to change without any notice. Prices are COD cash/cashiers chk.



Online Service: Challenges And Opportunities

It's mid-January, and Tim Oren is having a fairly intense week. As CompuServe's recently appointed vice president of future technology, he's simultaneously attending the RSA Data Security conference and spending lots of time online, coping with the online conflagration following the service's announcement concerning the need for licensing .GIF. (See Online Services column).

Still the online king of the hill, a position it's occupied profitably since its foundation in the 1970s, CompuServe faces new challenges—not only from irate .GIF users this particular week, but from competitors America Online (AOL) and Prodigy. Not to mention the explosively growing Internet marketplace, the telephone companies, the cable industry, and Microsoft. Historically the venerable service has adapted well to changes in its markets—originally a timesharing service, it saw that aspect of its business erode as personal computers became popular, and capitalized on the fact that its customers liked to use the service to talk to each other.

Oren comes to CompuServe, where he once served as co-sysop of the Atari forum, from Apple and Kaleida. He's charged with implementing some of the advanced technology he's been working on into the service's ever-evolving business. (CompuServe, 1-800-554-4079)

What were you doing at Apple, what were you doing at Kaleida, and how does that lead to CompuServe? Seems like a bit of a stretch.

Actually, from my point of view it was extremely logical. The last position I held at Apple was managing research in Advanced Technology. We were looking at things like hypertext and text databases, agent technologies—one of the last projects I worked on was something called Telecommunity. We were also looking at collaborative multimedia and so on.

At the time that Kaleida became available as an option, it was because they'd decided to take on doing a networked version of ScriptX. ScriptX is the product of Kaleida Labs that is an attempt to be a cross-platform authoring and delivery language for multimedia. I came in there to build a team that would create a networked version, that would allow one to specify interactive multimedia in a networked situation instead of just off a CD-ROM.

Given what I'd been doing in terms of back-end database architectures, multimedia for groups, and the interest I had in telecommunity stuff, for which I'd put in some long discussions with [*Virtual Community* author] Howard Rheingold, for instance, it seemed like a natural, to want to build that platform.

So I jumped over to there. My interest was building a platform I'd want to use to support some of the concepts we'd been working on.

Well, as you know, there were some cutbacks there, and the stuff that was cut back was the further-out stuff.

I.e., what you were interested in.

I.e., what I was interested in. And I saw it coming far enough out to put out a few feelers. A recruiter who will go nameless but who must have psychic powers called me up at about the same time and said, "How'd you like to move to Columbus, Ohio?" [*laughs*]

It didn't seem like the obvious move until they explained what was going on, that they were looking for someone to help bring advanced technology into CompuServe more quickly.

The service is essentially still text-based?

No, it's been graphics-based for some time. There are some portions of it that still are ASCII menus, particularly some of the older parts of the service, or the things that are more for sophisticated users, like financial databases and so on. But good chunks of the service, like *US News* as an example, are graphic at this point.

That's good, that's what you've got to do these days, but it's not actually out ahead. Part of what they wanted was somebody who had some experience in transferring advanced technology out of research and into products and services. I had that experience, and they were in the online business, which by the rationale I've just told you, I was more or less headed toward.

Upon due reflection it seemed like a good fit, and a chance to make a difference in a company that did need to move forward. And they offered me some pretty good terms, I have to confess, so—sold!

How would you compare the two company cultures? CompuServe is after all owned by H&R Block.

It is owned by H&R Block, but I would have to say that the company cultures between Block and CompuServe are quite different. We operate in a way that's connected up basically at the executive level.

So I assume you're talking about the contrast between CompuServe and Apple. I'd say the thing in common is a very casual culture, a lot of lateral communication. The only strange thing—there's a small executive parking lot. [*laughs*] I felt a little weird about that, because that was not the Apple way.

I think what's somewhat different, and a little bit refreshing, is that at this stage of the evolution of Valley culture, there's very little loyalty between companies and employees. It seems like a bygone thing—everybody's looking for the next gig, and the company's looking for the new people. That does, I guess, produce responsive organizations that turn around very quickly, and it produces people that are always thinking about "How do I stay on the edge?"

This gets kind of exhausting after a while.

Exactly. And I think one thing I found refreshing with CompuServe is that there does seem to be a little bit of mutual loyalty in the culture, which is different.

So where do you see online services in general, and yours in particular, going? In that market, the world has changed almost unrecognizably in the last year, even. Ordinary people are getting online in droves. The Internet is suddenly mainstream, and people are coming in from that direction. Microsoft has not only announced it's going into the online business, it's in the process of acquiring Intuit, which must be causing the guys at H&R Block to go "Cowabunga!" [*laughter*]

We certainly don't take that acquisition as a friendly move! [*laughs*]

I think you've already hit the main issues. I'll add a couple more in there—the actual and potential increases in bandwidth to the end-users; the kinds of technologies that makes possible; the worldwide scope of not only our service but the Internet, so that we've now got different physical-world cultures coming face to face in the nets. All of those are things that are very interesting right now.

Although I should hasten to say that as in most popular phenomena, the pace of change is a little bit exaggerated. There's no disputing that the Internet is probably the biggest driver now in terms of change, simply because of its sheer size, its growth rate, the degree of standards it's causing to spring up throughout the world. TCP/IP is sort of the literal backbone of the Internet, and we've responded to that by going into the IP access business.

You can see other standards coming along—the Web is one to be dealt with as well. I think that ability to go out and interoperate between systems that weren't planned in a monolithic fashion is probably the most profound change that the Internet is pointing toward.

Up to this point, commercial services have been their own isolated little worlds, and you might have had ways to go out, but they had their proprietary interface and proprietary content...

And one thing I'll say is that's probably not going to go away. I think that in-a-bottle, totally proprietary approach needs to go away over time; but there are a large number of people who, for whatever reason, want a unified view of what's out there, whether it's Internet or other sources of information.

Part of what's going on on the Internet is that we're in one of those situations where the rising water lifts all the boats. All the brouhaha about the Internet has generally warmed the market for all of us. I'm sure it's true of [AOL president] Steve Case and the folks over at Prodigy as well as us—now that there's a big buzz about Internet online, we don't have to go out quite so much and educate the market.

PCs are becoming pervasive as household appliances—Steve Jobs' vision is now coming true. And a lot of people open them up after Christmas and say, "Oh, what's this CompuServe thing?" "Oh, I heard about online, I'll give this a try."

So there's a little bit of pre-education going on.

Then, being an old Apple person, I recall something that Apple did once upon a time, which was to put Macintoshes into the universities at a very low price.

Steve Jobs was a wily dude.

Yes. Steve was a fox. What was going on there is very obvious at this remove—those guys were about to graduate and get salaries and positions of influence in business. I think part of what's going on now with the Internet is

Computerlane Inc.

Corporate Accounts Welcome.
Volume Discounts
(Export Available)

818-884-8644 & 213-625-7325 • FAX: 818-884-8253
7500 Topanga Canyon Blvd. Canoga Park, CA 91303
Hours: Monday - Friday 9-6 • Sat 10-5

Prices reflect 5% Cash Discount
Prices are subject to change without notice
Not responsible for typographical errors

IBM

NEW RELEASE

IBM PC 300 SERIES .....CALL
50MHz - 100MHz Processors, VLB to PCI 64 bit Video, MultiMedia models

IBM PC 700 SERIES .....CALL
90 MHz - 100 MHz processors with ISA or PCI or MCA architecture. 2MB 64-bit Video Card, Business Audio, Plug & Play

IBM PCI SERVER 500 .....CALL
90 MHz processors, non-Array or Array models

Wide SCSI or Wide Array SCSI controllers, CD-ROM Drives, 22 Drive Bays
THINKPAD 755C .....CALL
THINKPAD 755CS .....CALL
THINKPAD 755CE .....CALL
THINKPAD 755CD .....CALL
ALL PS/2 COMPUTERS & PS/2 SERVERS are also available

INSTALLATION
TRAINING
FREE ESTIMATES
CALL FOR PRICES
Authorized Dealer

Novell Certified NetWare

SPECIAL DEAL!

IBM SLC2/66 + Math Co $175
IBM BLC3/75 + Math Co 225
INTEL 90MHz CPU + Board 945
INTEL DX2/66 CPU + Board 325
420MB Disk 199
540MB Disk 225
1GB Fast IDE 505
1GB Fast SCSI .....$ave
call for quantity discounts

ACS SUPER SAVINGS!

ACS 486 SLC2/66 .....**$1096**
ACS 486 BLC 3/75 .....**$1131**
ACS DX2/66 .....**$1245**
- Desktop/Mid Tower Case
- 4MB RAM
- 420 MB Hard Disk
- 1.44MB Floppy Drives
- SVGA Monitor, .28 1024x768 (256)
- IBM 1MB VLB Video
- 101 Keyboard & Mouse
- Microsoft compatible Mouse
- MS DOS & Windows 3.1 w/ manual & Discs

ACS PENTIUM 90MHz SPECIAL

- Original Intel Pentium 90 MHz Motherboard w/CPU
- Desktop Mid-Tower Case
- 8MB RAM
- 540 MB Hard Disk **$1999**
- 1.44MB Floppy Drive
- Orchid 64-bit 2MB PCI Video
- Enhanced 101 Keyboard
- Microsoft compatible Mouse
- MS DOS & Windows 3.1 w/ manual & Discs

UPGRADE TO 1GB $350

MANAGER'S SPECIALS

IBM PC 700 90CDS

90 MHz processors, 16 MB RAM, 540 MB Disk, Double Speed CD, Sound Card, Speakers, DOS, Windows, Mouse, Lots of Multimedia Software. Call for Details!
$SPECIAL

IBM PC 300 DX2/66

8MB RAM,
3.64 MB Disk,
DOS, Windows, Mouse
SPECIAL

CD ROM PACKAGES

DIAMOND 4X CD PACKAGE ..**$545**
CREATIVE LAB 3X .....**SAVE**
MEDIA 2X PACKAGE **$225**

CD ROM DRIVES

NEC 2X/4X **$180/399**
TOSHIBA 2X/4X **$299/325**
TEAC/4X **$340**
PLEXTOR **$445**

SOUND CARDS

SOUND BLASTER VALUE **$59**
SOUND BLASTER 16 .....**$79**
PROAUDIO SPECTRUM 3D...**$120**

VIDEO CARDS

MATROX 2MB PCI **$435**
MATROX 5MB **$799**
STEALTH 2MB PCI **$225**
DYNAMITE 2MB PCI **$225**

MEMORY & DRIVES

For IBM, COMPAQ, TOSHIBA, & HP
DESKTOP/TOWER
4MB/8MB/16MB **$165/399/645**
NOTEBOOKS
4MB/8MB/16MB **$220/420/840**
HARD DRIVE FOR NOTEBOOKS
250MB/340MB/540MB **$299/399/552**

DRIVE CONTROLLERS

DTC 2280 ISA IDE I/O $19
DTC 2278 VLB IDE I/O 29
Acculogic PCI IDE 39
Future Domain 8bit SCSI 39
Adaptec 1510/1520/1540 .....64/69/189
Adaptec 2940 PCI SCSI 289
Adaptec 2940 W 349
Adaptec 2842 VL 239

HP TONER CARTRIDGES

4P/4 .....**$95/102**
4L/4P **63/63**
DeskJet Color 27
2SI/4SI 115
DeskJet Black 22

VIDEOBOARDS ATI
Graphics Pro Turbo 2MB/4MB $399/589
Ultra Pro VLB/PCI 2MB 275
Graphics Expression PCI/VLB/ISA 209
Winturbo PCI/VLB/ 296
DIAMOND
ViperPro2MB/4MB VLB or PCI 399/549
Stealth 64 2MB VLB/PCI VRAM329
Stealth 64 4MB VLB/PCI VRAM469

HERCULES
Graphite Power 2MB VLB/PCI$299
Dynamite VLPro 1MB/2MB VLB 149/199
Dynamite Pro ISA 1MB/2MB VLB 159/199
Dynamite Power PCI/VLB w/2MB 219
NUMBER NINE
GXE64 2MB VLB/PCI 252
GXE64 Pro2MB VLB/PCI 359
OTHERS
Cirrus Logic 1MB VLB 89
Trident 1MB ISA 69

HEWLETT PACKARD

HEWLETT PACKARD

HP DeskJet 320	$290
HP DeskJet 540	$285
HP DeskJet 560C	CALL
HP DeskJet 1200C	$955
HP DeskJet 1200C PS	$1499
LaserJet 4L	$630
LaserJet 4M Plus	$1840
LaserJet 4M	$1355
LaserJet 4P	$915
LaserJet 4V/4MV	NEW
LaserJet 4Si	$3999
LaserJet 4SiMX	$2790
HP COLOR LASER PRINTER	CALL
SCAN JET IICX	$889

• QUANTITY DISCOUNTS • ALL PRINTERS IN STOCK

COMPAQ

PROLINEA CDS DX2/66 8MB

Mid Tower Case 4MB RAM
- 420 MB Hard Disk
- 1.44 MB Floppy Drive
- 1 MB Local Bus Video Card
- Enhanced keyboard
- 3.1, Mouse Tabworks
- Encarta, MS Works, MS Golf, MS Money
- Compaq SVGA .28 Monitor
- 2X Speed CD-ROM Drive
- Sound Card, Speakers
- Microphone
- Compton's Encyclopedia
- 15 More Big Software titles

$1899

TAPE BACKUP

COLORADO
Jumbo 120/250 .....**$99/165**
Trakker 120/250 .....**220/354**
Power Tape 2GB **985**
Wangtek 525/1GB (int) **560/720**
Wangtek 4GB **1099**

PRINTERS

OKI ML 320/321 .....**$305/425**
OKI ML 590/591 .....**440/585**
OKI OL 410e/410 .....**645/520**
OKI OL 810/830 .....**899/1075**
CANNON BJ 10SX/200e **260/310**

TOSHIBA

- 4900CT: The Advanced MultiMedia Notebook
- 75MHz Intel DX4
- MultiMedia Ready
- Mic & Speaker
- Windows Sound System
- Many Extras!

$CALL

T3600CT
- 250MB
- ACTIVE COLOR

CALL

T4700CT
- ACTIVE COLOR
- 320MB

CALL

T1960CT
- DOS, WIN, MOUSE
- ACTIVE COLOR

200MB ....**CALL**
320MB ....**CALL**

T1960CS
- DOS, WIN, MOUSE
- COLOR

200MB ....**CALL**
320MB ....**CALL**

T3400
- 4.1 Lbs
- Monochrome

120MB..**BEST DEAL!**

CALL US FOR THE BEST PRICES ON ALL NOTEBOOKS

T4800CT
- 486DX
- Active Color

510 MB ...**CALL**

T1910CS
- DOS, WIN, MOUSE
- MONO/COLOR

200 MB ...**CALL**
200MB/CS .**CALL**

T2400CT
- DOS, Win, Mouse, SCSI
- 486 DX2, Active Color

250MB ....**CALL**
320MB ....**CALL**

T4700CS
- 50MHz, 486DX2
- Color, 2 PCMCIA

200MB .....**SAVE**
320MB .....**SAVE**
(*Factory Refurbished)

Apple® Macintosh · EPSON · Panasonic · COMPAQ · Microsoft · Texas Instruments · TOSHIBA · SHARP · CITIZEN · ZENITH data systems · IBM · AST · ALR · OKIDATA · NEC · Hayes · WordPerfect® · U.S. Robotics Zoom

The .GIF Situation

So Tim, what's the deal with .GIF?

I'll just give the top-to-bottom recap. Some time ago, CompuServe designed this file format called .GIF, which is basically for rasterized graphics, 8 bits, and so forth. It included a compression technique called Lempel-Ziv-Welch, LZW. It's a lossless compression technique to make smaller data out of bigger data by reducing redundancies, which is what you want to do with large graphics so you can send them across the line more economically.

This thing took off very nicely, one of the reasons being that CompuServe disseminated it to a large number of developers—people that were doing client software for the service, graphical client software, developers of graphics tools—and generally just made it available. We kept the copyright to the spec, but made it available basically to all comers. There was one revision of that in 1989 that added a number of features.

The rub is that unbeknownst to the original developers, LZW was under a patent held by Unisys Corporation. One of the issues is that we, and apparently a number of other people, found this technique in a journal. It was published without any disclaimer at that point saying that this was subject to patent. It was basically incorporated without that knowledge, and lo and behold in 1993 Unisys shows up saying, "We have this patent and you have infringed it."

When it came right down to it, CompuServe felt that it had to settle. We had a very large number of pieces of software out there that were using the technique, and a large number of developers had used it in good faith as well to develop their own tools, their own clients, and so on. So we basically reached an agreement with Unisys in the middle of 1994.

As part of that, there was a stipulation that there was a fixed time window in which we had to reach an agreement on a license that we could pass through to our developers. We felt we had to do that, because again, they'd used it in good faith, and they needed to be protected against any possible damages from that use, and we had to make sure that they could still continue to do business.

And your developers are who?

Developers are people in several classes. One of them is people that are producing client programs to CompuServe that aren't our own, for instance Navigator, TAPCIS, and others that use our technology. The other class is graphics developers—there's a large set of graphics forums on CompuServe for these people to congregate and talk about the tools they're building.

We were able to reach an agreement with Unisys that said for a fee, we could sublicense to the developers that were doing something clearly attached to CompuServe. There's a per-copy license fee that is for the most part a passthrough—there's some that we take off to cover our costs of administering the program, because up to now we didn't have a licensing program. This is not particularly a business we ever wanted, but we're now going to have to run a licensing business.

So you're not charging for .GIF, you're just recouping your costs.

Administrative costs, basically. We're going to have to hire a couple people to keep the books on this, which is more of an aggravation than it's worth.

But you're not making money on the deal?

We're not making money on the deal, and if we find out we are, we'll cut the fee, because we made a commitment we're not going to profit from that.

So we negotiated this passthrough, and the rub for a number of people, a great concern for the nets at large, has been that we've been unable to secure a passthrough that we could take to developers off of that we have all these people sitting in their dorms and their labs, and they have whatever rate—T1 and down—access to the Internet, and they're about to graduate, and some of them are going into businesses, and "I want my Internet!" There's another demand driver as well.

All that, in terms of warming the market, stimulating interest, is probably good news to us, both at the consumer and business level, as long as we're willing to go with the flow a little bit and work with the Net the way it needs to be worked with. The values we've got, which are basically consistency, bringing together a number of offerings in one place, providing a somewhat more safe playing field—those don't go away because you're changing your base of technology.

So I would have to say that if we or our two major competitors played like dumb elephants and sat there, we would indeed be in grave danger, because eventually the Internet will allow one to have a basically free market of specialists, who can attack any particular component of any of our businesses. But I don't think you can look at what any of us are doing right now and say that we are failing to understand that message.

CompuServe is still the king of the online hill, though your competitors, AOL in particular, are quite aggressive. How would you differentiate CompuServe from your chief competitors?

Right now, yes, we are the largest in terms of number of accounts. One of the other things we have is international reach at this point, which our competitors don't.

The other thing is the type of services we offer. We've largely tended to specialize in things like large technical support forums—we've got a very large technical community out there. Financial databases. We're moving into the more entertainment-oriented areas, but in terms of people that are solid longtime online users in those categories. Those are the people that tend to become the loyalists.

Of course everybody that looks at online—whether it be us, AOL, The WELL, or whatever—knows that the ones that talk to each other are the ones that stay. I think what you can say about CompuServe is it's got the most viable and vibrant communities that are interested in things like technology, like finance, like a number of strong hobbies. I for instance hang out in the genealogy forum—it's one of the strongest areas out there in cyberspace for doing that kind of thing.

I would say that simply the breadth of offering and the robustness of the communities that have built up over time are some of our biggest assets going forward.

How does the relationship with H&R Block work? Do they have a significant presence on CompuServe?

Not a large one, but we have done a number of services for H&R Block to support their tax business. For instance, we run the computers that do their electronic filing. They file it over our network. Some of our folks will go out and help them do things, like configure the standard PCs that they're going to use for tax prep in the Block offices.

One of the more interesting things we've started doing with them actually centers around the unit called H&R Block Financial. We have a CompuServe affinity VISA card issued by that division; what we have on the service is a place where you can check your statement online any time you want. So if you have a CompuServe VISA card and you have an account with us, and you have any doubt whether something has hit your bill or whether you were billed accurately, you can just pull the statement up online.

And, as the press has noticed, Block also owns the Managing Your Money product. Which, just as Bill Gates felt that Intuit was a fit-together for an online service...

Let's talk about that—it doesn't take too much imagination to see CompuServe and H&R Block going into online transactions and finance in a big way, and regarding this move by

When You Buy From USA Systems You Buy Quality

MULTIMEDIA BEST BUY

- **8MB RAM & 256K Write Back Cache**
- NEC Triple Speed SCSI CD ROM
- 16 Bit SCSI Sound Card
- **2 Amplified Stereo Speakers & 4 Top CD Titles**
- **540MB Enhanced IDE Hard Drive**
- One Floppy Drive (3.5" or 5.25")
- PCI/VLB IDE Enhanced Hard Drive Controller
- PCI/VLB Diamond Stealth 64 (2MB VRAM)
- **15" Flat Screen Monitor**
- Mini Tower or Desktop
- 101K Enhanced Keyboard
- Serial Mouse w/ Pad

486DX2-66 VLB $1905
PENTIUM-60 PCI.....$2326
PENTIUM-66 PCI.....$2426
PENTIUM-90 PCI.....$2526

MULTIMEDIA FAMILY PC

- **4MB RAM & 256K Write Back Cache**
- **420MB IDE Hard Drive**
- **Double Speed CD ROM**
- **Opti 16 Bit Sound Card**
- **2 Amplified Stereo Speakers & 4 Top CD Titles**
- One Floppy Drive (3.5" or 5.25")
- VLB/PCI Enhanced IDE I/O Controller
- VLB/PCI Graphics Accelerator (1MB DRAM)
- 14" Non-Interlaced SVGA .28 Monitor
- Mini Tower or Desktop Case
- 101K Enhanced Keyboard
- Serial Mouse w/Pad

486SX-33 VLB $1222
486DX2-66 VLB $1306
PENTIUM-60 PCI $1710

All PENTIUM Motherboards Made By Intel Corporation

VLB/PCI PROFESSIONAL

- **8MB RAM & 256K Write Back Cache**
- **540MB Enhanced IDE Hard Drive**
- PCI/VLB Enhanced IDE HDD Controller
- **PCI/VLB Graphics Card (1MB DRAM)**
- One Floppy Drive (3.5" or 5.25")
- 14" Non-Interlaced SVGA .28 Monitor
- Mini Tower or Desktop Case
- 101 Key Enhanced Keyboard
- Serial Mouse with Pad

486SX-33 VLB $1166
486DX2-66 VLB.....$1246
486DX2-66 PCI $1276
PENTIUM-90 PCI $1888

P5 PCI DREAM MACHINE

- 256K Write Back Cache
- **16MB RAM (Up to 128MB)**
- **1.05GB Super Fast SCSI-II Hard Drive**
- One Floppy Drive (3.5" or 5.25")
- **PCI Adaptec SCSI-II Controller**
- 15" Flat Screen Super VGA Monitor
- **PCI Diamond Stealth 64/2MB VRAM**
- Mini Tower or Desktop Case
- 101K Enhanced Keyboard
- Serial Mouse with Pad

PENTIUM-60 .....$2698
PENTIUM-66 .....$2826
PENTIUM-90 .....$2896

CHAPLET iLuFA NOTEBOOK

- Intel 486 CPU
- 9.5 Dual Scan Color, Local Bus VGA
- 2 PCMCIA Type II or 1 Type III
- Trackball on Front Center
- Built-in Sound Card
- Carrying Case
- 4MB RAM up to 20MB
- 250MB Hard Drive

486SX-33 Mono/STN.....$1500/1930
486DX-2/50 Mono/STN ..$1645/2075
486DX2-66 Mono/STN ...$1700/2130

MOTHERBOARDS (0K WITH CPU)

VLB MB486DX2-66/256K 3 VLB, ZIF (4X30P/2X72P) $280
PCI MB486DX2-66 256K 4 PCI/2 ISA/2 VLB/ZIF (72P) 318
VLB MB486DX2-66/256K 3 VLB, GREEN, ZIF (30/72P) 295
VLB MB486DX4-100/256K 3 VLB, ZIF (30/72P) 335
PCI MB486DX4-100/256K 4 PCI/2 ISA/2 VLB/ZIF (72P) 375
PCI PENTIUM-60/256K SIS/4 PCI 545
INTEL MADE PENTIUM 60MHz/256K w/ENHANCED IDE IO 656
PCI PENTIUM 90MHz/256K 4 PCI, SIS CHIPS 816
INTEL MADE PENTIUM 90MHz/256K w/IDE IO 965
PCI EISA PENTIUM 90MHz DUAL PROCESSOR, 4 PCI/4 EISA, 6X 72P 1865
***486DX4-100 CPU is Made by AMD**
IBM OPAL VLB 486SLC2-66/64K W/CPU & MATH...185

VIDEO CARDS

ISA
VGA 256K R-TEK $25
SVGA 512K TRIDENT 35
SVGA 1MB TRIDENT 53
VLB
CIRRUS LOGIC 5428 1MB UP TO 2MB $67
DIAMOND STEALTH 24 1MB (OEM) 119
ORCHID KELVIN 64 1MB/2MB (OEM) 129/169
DIAMOND SPEEDSTAR PRO SE 1MB/2MB DRAM (OEM) 105/145
DIAMOND STEALTH 64 1MB/2MB DRAM (OEM) 138/184
DIAMOND STEALTH 64 2MB VRAM/4MB VRAM (OEM) 275/415
ATI GRAPHICS WINBOOST VLB-64 1MB/2MB DRAM (OEM) 149/189
ATI GRAPHICS WINBOOST VLB-64 2MB/4MB VRAM (OEM) 265/465

PCI
ADVANCE LOGIC 2301 1MB $85
CIRRUS 5434 1MB UP TO 2MB 94
ORCHID KELVIN 64 1MB/2MB (OEM) 129/169
DIAMOND STEALTH 64 1MB/2MB D(OEM) 135/181
DIAMOND STEALTH 64 2MB VRAM/4MB VRAM (OEM) 271/415
DIAMOND VIPER SE 2MB VRAM (OEM) 255
ATI Graphics WinTurbo 2MB/4MB VRAM (OEM) 265/465
ATI GRAPHICS PRO TURBO 2MB/4MB VRAM (Original) 365/555

CONTROLLER CARDS

HIGH SPEED AT IO (16C550 CHIP) $21
HIGH SPEED IDE/IO (AT) 27
VLB HIGH SPEED IO w/IDE (2HD/2FD) Ctrl 36
VLB ENHANCED IDE/IO 25
PCI ENHANCED IDE (MODE 3, 4HDD) 25
ADAPTEC 1542FC SCSI CTRL CARD (OEM) 175
ADAPTEC 1542CFK SCSI CTRL WITH KIT **230**
ADAPTEC 2742T EISA SCSI-II CTRL (BARE) 295
ADAPTEC 2742TK EISA SCSI-II CTRL W/KIT 335
ADAPTEC 2842AK VLB SCSI-II CTRL W/KIT (ORIGINAL) **230**
ADAPTEC 2940K PCI SCSI-11 w/KIT (OEM) 220
ADAPTEC 2940 PCI SCSI-II (BARE) (OEM) 195

HARD DISK DRIVES

WD 420MB/13MS IDE $185
WD 540MB/11MS IDE 218
WD 850MB/10MS IDE 300
WD 1 0GB IDE 415
MICROPOLIS 2217 1.7GB/SCSI 885
MICROPOLIS 4221 2.1GB/8.5MS/1" SCSI-2/AV MODEL 1010/1120
MICROPOLIS 3243 4.03GB/8.5MS/3.5" SCSI-2/AV MODEL 1869/2305
MICROPOLIS 1991 9.0GB/8.5MS SCSI-II 3185
(MICRO HAS 5 YEAR MFG. WARRANTY AND WD HAS 2 YEAR)
PLEASE CALL FOR MORE MODELS!

MONITORS

KFC 9" MONO AMBER $115
KFC 9" MONO-VGA PAPER WHITE 135
12" BTC MONO AMBER 75
14" BTC MONO PAPER WHITE 86
14" BTC MONO-VGA PAPER WHITE 99
CTX6468ES 14" SVGA 1024 X 768 .28DP 215
CTX1451 14" SVGA 1024 X 768 .28DP NI 240
CTX1562GM 15" SVGA 1024 X 768 .28DP NI MPR3 335
CTX1765GM 17" SVGA MPR3 625
CTX 1785GM 17" 675
VIEWSONIC 6E 14" .28DP 1024 X 768 NI 269
VIEWSONIC 15 15" .28DP 415
VIEWSONIC 15G 15" 355
VIEWSONIC 17E 17" 720
VIEWSONIC 17G 17" 750
VIEWSONIC 17 17" 835
VIEWSONIC 17V 17" 785
VIEWSONIC 20 20" .28DP 1600 X 1280 NI 76Hz LOW RAD. 1450
VIEWSONIC 21 21" .25DP 1600 X 1280 NI 76Hz LOW RAD. FLAT 1666

MULTIMEDIA

PLEXTOR QUAD SPEED INT. CD ROM (150MS/600KB/SEC.) $419
TOSHIBA QUAD SPEED 3501 CD ROM 295
TEAC QUAD SPEED INT. CD ROM AT 195
MITSUMI QUAD SPEED IDE CD ROM 195
NEC 3X SPEED CDR510 INT. CD ROM (OEM PKG.) .280
SOUND EASY PRO 16 WITH CD ROM INTERFACE 55
CREATIVE LAB SOUND BLASTER 16 MCD (OEM) 80
CREATIVE LAB SOUND BLASTER 16 SCSI (OEM)....120
CREATIVE LAB SOUND BLASTER 16 ASP SCSI-II....205
CREATIVE LAB SOUND BLASTER 16 ASP M-CD 175
CREATIVE LAB SOUND BLASTER AWE32 (32 BIT)...249
CREATIVE LAB DISCOVERY CD 16 MULTIMEDIA UPGRADE KIT: 249
- Sound Blaster 16, Panasonic 2X CD ROM, Speakers, 15 Titles
CREATIVE LAB DIGITAL SCHOOL HOUSE MULTIMEDIA UPGRADE KITS: 285
- Sound Blaster 16 MCD, 2X CD ROM, Speakers, 22 Titles

NETWORK PRODUCTS

ARCNET
16 BIT ARCNET, COAX BUS **$36**
16 BIT ARCNET, COAX STAR **35**
16 BIT ARCNET, TWISTED PAIR **46**
HUB
ARCNET 8 PORTS ACTIVE HUB, COAX $99
ARCNET 8 PORTS ACTIVE HUB, TWISTED PAIR 140
ARCNET 4 PORTS PASSIVE HUB 11
ENET 8 PORTS HUB (AUI/BNC/8RJ45) 145
ENET 12 PORTS HUB (AUI/BNC/12TP) (1 DEDICATED) 275
ENET 12 PORTS HUB (AUI/BNC/12TP) 390
ENET 12 PORTS HUB \ (AUI/BNC/12TP, STACKABLE) 680
ETHERNET
16 BIT ENET COAX OR 10-B-T, JUMPERLESS $29
32 BIT EISA ENET (AUI/BNC/TP) 3-IN-1 195
32 BIT VLB ENET (AUI/BNC/TP) 195
PCI ENET (BNC/AUI/TP) 145
TAPE BACK-UP
COLORADO DJ20 250MB $155
COLORADO DJ35 350MB 185
COLORADO JT350 340MB TRAKKER (EXTERNAL) 325
SMARTLINK 2400 INT. DATA MODEM 25
SMARTLINK 96/96/24 INT. FAX MODEM 30.75
SMARTLINK 14.4 INT. FAX MODEM 75/95
SMARTLINK 14.4 FAX MODEM 75/95
SMARTLINK 14.4 w/VOICE MAIL FAX MODEM 85
SMARTLINK 28.8 INT./EXT. FAX MODEM 189/215
US ROBOTICS 28.8 FAX MODEM 230/250
ARTISOFT
ARTISOFT LANTASTIC/AI V 6.0 SINGLE $70
ARTISOFT LANTASTIC/AI V 6 0 5 USERS 305
ARTISOFT LANTASTIC NODE RUNNER V6.0 STARTER KITS (#9002-60) 328
ARTISOFT LANTASTIC NODE RUNNER ENET 8/16 BIT COAX (#843) 185
ARTISOFT LANTASTIC NODE RUNNER 8/16 BIT 10BIT (#870) 185
ARTISOFT LANTASTIC NODE RUNNER ENET COAX/10BT COMBO (#879) 228
D-LINK (ORIGINAL)
D-LINK ENET COAX $79
D-LINK ENET 10BT 75
D-LINK COAX/10BT COMBO 99
NOVELL
NOVELL NETWARE 386 V.3 12 5-USER 3 5" $540
NOVELL NETWARE 386 V.3.12 10-USER 3 5" 1150
NOVELL NETWARE 386 V.3.12 25-USER 3.5" 1650
NOVELL NETWARE 386 V.3.12 50-USER 3 5" 2000
NOVELL NETWARE 386 V.3.12 100-USER 3 5" .... CALL
NOVELL NETWARE 386 V.4.1 5-USER (CD ROM) 495
NOVELL NETWARE 386 V 4.1 10-USER (CD ROM) 1090
NOVELL NETWARE 386 V.4.1 25-USER (CD ROM) 1650
NOVELL NETWARE 386 V.4.1 50-USER (CD ROM) 2100
NOVELL NETWARE 386 V.4.1 100-USER (CD ROM) ....CALL
NOVELL NETWARE PERSONAL NETWARE V.1.0 (OEM) 45

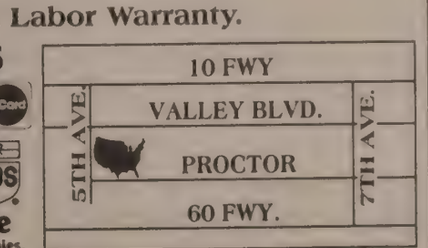
All Systems Come With One Year Parts and Labor Warranty.

210 S. 5th Ave., City of Industry, CA 91746

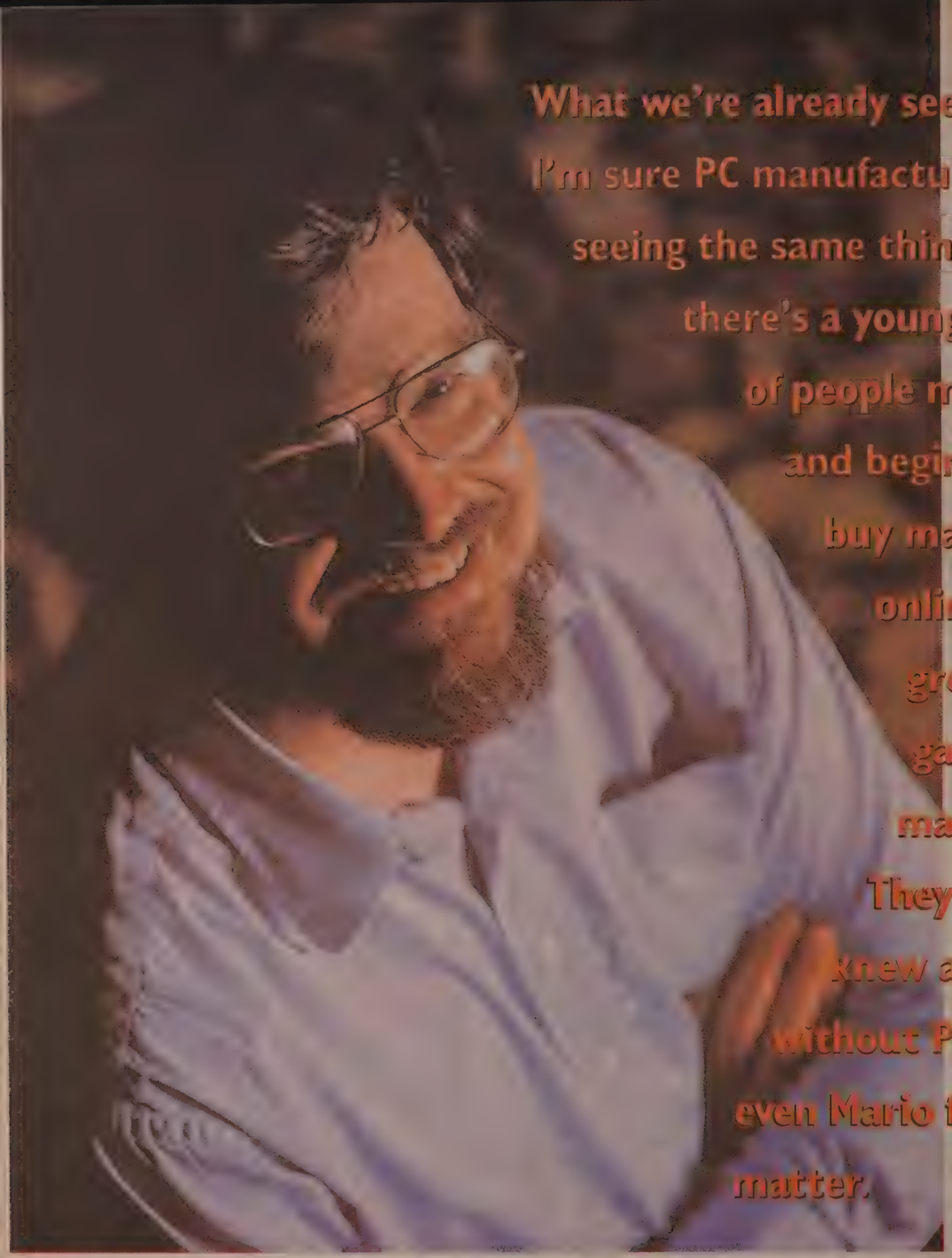
Tel. (818) 336-6366

Fax (818) 336-7996

Dealers Welcome · Additional Discounts Available



Price, specifications and availability are subject to change without notice. Brand names are registered trademarks of their respective companies.


What we're already seeing, and I'm sure PC manufacturers are seeing the same thing, is that there's a younger group of people moving up and beginning to buy machines, go online, that grew up with game machines. They never knew a world without Pong. Or even Mario for that matter.

Microsoft with some trepidation.

I think you're right to say that there's an obvious fit there, but I'm not going to use this particular time to say too much about exactly how we're going to exploit that! But Gates isn't the only one who figured this out.

That in turn raises issues like those being presented at this conference, in terms of security.

Mm-hm. Security, and as you said, transactions. Because, as they're also discussing at this conference, security encompasses a lot of different concepts—everything from passwords to prove who you are, up to securing transactions, card numbers, things like that, and on up the gamut to full privacy.

That's one of the reasons I'm here paying attention to this. On the looking-to-our-customers side, what will they need in the form of proving who you are online in the future? What will they demand in terms of privacy four or five years out? Then looking backwards, as it were, to the financial institutions that we'll be working with: What kinds of technologies are they signing up for, to make sure that the transactions they get off of our type of systems and the more open Internet systems, are in fact valid and reasonably fraud-proof?

It's quite obvious there needs to be industry consensus over what those are, just as the banks right now have a wide variety of competitors doing credit-card clearing. VISA itself, merchant banks, credit-card clearing operations all do this, but they all interact around common standards. That's one of

our service—Web developers and people that aren't clearly doing something associated with CompuServe. I think that's part of what's caused a great deal of concern, other than just plain there's dollars involved now, and before it was basically free to all comers to use this.

So the Adobes of this world have to go to Unisys and make their own deals.

Yeah.

There's some things in the whole issue that need to be made clear. One is, we still are not claiming any rights to the .GIF spec. The only rights at issue here are the patent rights in the LZW. So if somebody's off our service and feels they may have an infringement issue, they need to go talk to Unisys, not us. As far as we're concerned, they're clear.

The other thing that's gone around on the nets, that I think has been pretty well refuted but needs to be said explicitly, is that somebody who's an end-user that has .GIF files, whether they're stored on a hard drive or you're transmitting between them and a bulletin board, or even on a Web server, is not infringing. They basically own a piece of data that was processed through something that embodied that invention.

It's just as if somebody had a bunch of coffee that they'd ground up in a coffee grinder that unbeknownst to them had infringed a patent on the mechanism. You as the end-user are not infringing. And even if you yourself compressed or expanded the .GIF, if you're operating a tool that you bought from somebody that either has, or even hasn't, licensed the patent, you don't have a problem.

Your developer may have a problem. They may need to go talk to Unisys, or if they're doing it in conjunction with CompuServe, talk to us.

The end-user has not got an issue here. You can download .GIFs until the cows come home, and you are not an infringer, and there is no such thing as a tax.

You can put .GIFs in your Web page?

You can put them in your Web page, because even if, for instance, you ran Photoshop and compressed it and put it in your Web page, because you're operating a piece of code that somebody produced, you're okay. Not a problem.

There's a legitimate issue in terms of people that, for instance, are writing compressors or decompressors, import and export modules, or tools that primarily deal with .GIF. They need to talk to their counsel or decide themselves that they need to talk to Unisys.

And that, undoubtedly, is what has caused the legitimate part of the furor out there, other than the misunderstandings.

I ended up out there talking on the Net. Credit's due to a number of people, some of them being members of my own team that were already observing some of the Web groups because of our interest in that, but also Tom Mandel of SRI [and AOL's *TIME Online*] and Kathy Medich of CommerceNet, who called me up and said, "I think you've got a problem."

They were quite right. I had a problem. [*laughs*]

From what I saw on The WELL it was boiling nicely by the time you got there.

Yes, well, we were about twenty hours behind the curve.

Let's say the release of the information could have been handled in a somewhat better fashion. [*laughs*] It happened the way it did due to an approaching deadline due to the original agreement with Unisys, but that probably still doesn't excuse that the announcement was put out over the holidays with no explanatory statement. That plus a certain amount of misinterpretation caused the big flap.

And then I basically got the permission of my CEO to go out there and talk about it, to the extent that I could clear up what was fact and what was not fact. Then people could decide for themselves what was the big issue. Generally the Net was extremely courteous; for a little while I felt like I was going to have some sympathy with Andy Grove, [*laughs*] but for the most part people were very polite.

I got a certain amount of mail, which actually ranks in the dozens, not the hundreds or thousands, of messages, and almost all of it was polite inquiries, good suggestions, requests for more information or clarification. Some flames, but I know how to delete them. [*laughs*]

By now the discussion on The WELL seems to have devolved into how to rewrite the spec so it doesn't use LZW.

Right, and we're watching that discussion, on The WELL, on our own graphics forums, on the Internet. By the time you actually print this, we may have been able to respond to some of that, because there's been some very helpful suggestions out there, not only technically but in terms of possible legal approaches. I've got a technical team looking at the technical suggestions, and our legal people are reviewing some of the other issues. Maybe there'll be some solutions coming out of it.

Actually we were already looking at what it would take to produce the next generation .GIF, so I think it's safe to say that that's going to get accelerated and we've heard a great deal of input that would be useful in that.

One of the concerns we've got, for the good of not only CompuServe but the whole community, is that this doesn't turn into something that fragments the graphics standards. One of the beauties of .GIF, because it was made pervasive early on, is that everybody started using it. So if we had to put five different little standards that each do something a little bit different, some of them optimized to avoid the patent, some of them optimized to add features—there's lots of reasons for not wanting lots of standards. So we may find it in our best interest as well as those of the developers to try and converge that whole process again.

Making darn good and sure this time that we don't inadvertently stick any patented technologies into it. [*laughs*] Or at least make sure that if there are, they're all bought out at the beginning.

Because we don't need this one again.

One other thing about future standards. One of the things that everybody involved in this has got to realize is that for us industry insiders and the like, this is a big deal. For most of my users and many of the Internet end-users, they won't have heard of this, they won't understand this, and if we're going to get them to change, they have to see some benefit.

If you weren't actually monitoring this business and somebody said, "You really need to take your Photoshop and throw away your .GIF import and export and get something new"—why should you bother? You need to see some benefit out of that.

So I think that's part of what needs to be taken into account in doing some further design, as well as making sure that one's well clear of the whole patent thing. At the end of the day, the person that's actually paying the bill for the software or service has to see a benefit or they're not going to change. And then you end up back in the soup, fragmented, staggered across two incompatible standards. There's been a number of creative suggestions also made out there as to how one could avoid infringement but still maintain some form of data compatibility. We're looking at that too.

It'll play out. I think that at this point people have kind of realized where the technology and the legal issues actually are. Now the question is, How do we respond to all of this in a fashion that doesn't leave the user community sort of wondering what happened?

It would help if the patent office were a bit more forthcoming about this sort of stuff.

It would help if there were a much more public way of disseminating that type of stuff—maybe this whole THOMAS thing gives the indicator of where the patent office ought to be going in terms of open disclosure and easy search of what's out there. ■

the big paradoxes right now for those of us that want to be out ahead a little bit in terms of anticipating what could happen in the market—to figure out what those standards are.

It's like fast modems—the early ones have all kinds of weird incompatibilities that disappear by the time they hit the mainstream.

Well, we may have a better chance here in some regard, because the modem manufacturers of course were moving as fast as they possibly could, because that's a cutthroat business right now.

I think in this case, we and, for instance, our other partners in CommerceNet are far enough ahead of the demand that we've got some possibility of sitting down and making some sensible choices in terms of interoperability and standards.

Speaking of CommerceNet, what is that?

It started out here in Silicon Valley due to a modest-sized federal grant to try to put together one of these technology reinvestment things. Part of what they started doing was pulling together various classes of companies that might have some interest in doing business on the Net, the open network, as opposed to, for instance, a private EDI network.

That covers a wide variety of possibilities, so there's discussion of everything: "Let's do EDI in a provable fashion real-time," "Let's think about some of these security problems," "Let's worry about how to pass the credit card information around." It's become sort of a meeting ground for industrial partners, or possibly competitors, to get together and talk about some of the standards issues that may arise.

It's also turning into a hub for various trial activities. Trial is basically "we're going to turn this on and see if it actually works," versus sitting around and writing a lot of specs and having standards meetings. A little bit more, if you will, the Internet approach—"if this works, and if people seem to like it, then we'll run it up the flagpole."

So far I think the biggest positive contribution it's made is to assemble a number of people that are looking very seriously at the Secure HTTP standard, a further extension of the standard behind the Web that would allow for some selective security and privacy, so that you could do things like prove who you are on the Net and pass around your VISA number.

We're also working with a couple of Columbus-based companies, BankOne and Sterling, to see if we can put together a trial of this technology, with the intent of saying we could do one sample business end-to-end. Outside of Silicon Valley, Columbus is the biggest hub of CommerceNet activity, so one of the things we're trying to do is assemble a critical mass of companies in that geography, just as there is one out here. So we may be C-Net Midwest or something like that.

What's EDI? Electronic Data Interchange, but what does that mean in real life?

What it means is that you're sending around something called transaction sets. It indicates commercial deals. So for instance, suppose I'm a cataloguing company. I don't hold stock—what I'm really doing is merchandising the stuff and sending off orders to my suppliers to drop-ship to my end customers. There's a number of very large cataloguing companies that do business that way.

How do you do that? Formerly what you did is sent around a blizzard of faxes and paper to pass the orders around. What you might do with EDI is, when that order comes in, you type it into this electronic order set and boom!, it goes over the wire. And then they run off a batch of stuff and their warehousemen go out and deal with it, but paper doesn't move.

That type of thing is widely done in industry at this point. We carry some of that on our value-added network. There are specialists at it—Sterling Software, which I mentioned earlier, is a specialist in that market. One of the implications of this is, "Gee, if you can do this for fairly large-scale businesses, small-scale businesses are coming onto the big nets—maybe they'd like to be able to do that too." That's the potential there.

However, you can't say we're going to operate this over a totally closed network, because that kind of breaks down the premise that led them online to begin with.

This is pretty much something that operates between businesses rather than individuals, then?

That's a business-to-business function. Some of the other things that CommerceNet's looking at are the standards that would be used in terms of communicating between the end-users and the businesses, perhaps even between the end-users. Getting back to the issue of "How do I know my credit card got across the Internet without getting filched?" and "How do I know I was really talking to the guy's server, and how does he know that it was really me?" There are a set of issues like that, that when you're no longer connected more or less point-to-point on a private network like our own, you have to settle electronically and provably. That's really what this RSA conference is about—the sustaining technologies for that.

So far online transactions for individuals have been things like home banking, which has been a total fiasco. What needs to be done for it not to be like home banking—i.e. utterly useless?

Good question. [*laughs*]

For the banking part, you'd have to go ask the banks.

I think it needs to become pervasive. We're seeing that happen right now.

What do you see driving that?

I think it's back to the same thing—the PCs that are the points of access are now becoming widely enough pervasive in our society that I think the connected PC may soon pass what I call the fax point.

You remember when faxes were scarce, and it was an oddball thing to have on your business card? And suddenly, within the space of a few years, there were enough of them there that you wanted it on your business card, and the bottom dropped out of the price. Suddenly it was a business and social faux pas not to be able to give somebody your fax number.

For a certain class of people, we've already passed that point in terms of email. I think we're starting to get to that point in terms of some families, for instance—if Mom really wants to hear from me, get an email address! There's a big driver that says that people will go onto the wide nets for social purposes. And once they're there, then they're going to want to do transactions.

I think one of the generic mistakes that's been made with things like home banking, and potentially is being made in some of the visions for interactive TV, is that the urge to transact is not that far up there in terms of end-users' and consumers' priority of needs. Somewhere up above there are certainly the urge to be entertained, the urge to communicate, and maybe some other things. Those will become pervasive before transaction becomes pervasive.

My paper Land's End catalog works just fine.

Right, and you can drag it around to places you can't take your Mac or your PC to. Yes, we are getting small portable devices, but using those things hour-in, hour-out is a good way to put your eyes out and run your bill up to the sky. There are some things the old media are going to continue to do just fine.

Going back to home banking, there have always been two things that struck me as sort of stupid about it. To me, it's not nearly as useful as an ATM machine because an ATM machine will give me cash, and you'll never get that from home banking. But the thing that's more fixable is that initially at least, the banks were attaching obscene amounts of float to it. Until it's at least as real-time as an ATM, what good is it?

Right. This is classic marketing. With anything like this, you're going to have your early adopters. And in this case, home banking, they're going to be people that are very technically savvy, and probably smart enough to figure out some of those issues like float.

If you look at what's actually happened, what things *have* moved online that amount to transac-

The Pentium Alternative is Here !!!

Pentium Neptune™ SuperStation

- Intel Neptune™ Chipset
- 8MB RAM, 256KB Cache
- 540MB Hard Drive
- 1.44MB Floppy Drive
- ATI Mach 64™ PCI Accelerator w/2MB
- Enhanced IDE Controller
- 15" SVGA Digital Monitor (.28)
- 2 Serial, 1 Par, 1 Game Port
- Enhanced Kyb, Hi Res Mouse

Pentium 90 **$1958**

Multimedia QUADStation

- 8MB RAM, 512KB Cache
- 540MB Hard Drive
- 1.44MB Floppy Drive
- 15" SVGA Digital Monitor (.28)
- PCI Graphics Accel w/2MB
- Enhanced IDE Controller
- Quad (4X) Speed CD ROM Drive
- Sound BLASTER Stereo Card
- 80 Watt Amplified Speakers
- 2 Serial, 1 Par, 1 Game Port
- Enhanced Kyb, Hi Res Mouse
- Over 10 Multimedia CD Titles!

Intel Pentium 90 **$2288**

Intel Pentium 66 **$2138**

BLASTER WAVE32 Add 198.00

Multimedia GraphicStation

- 8MB RAM, 512KB Cache
- 540MB Hard Drive
- 1.44MB Floppy Drive
- 15" SVGA Digital Monitor (.28)
- PCI Graphics Accelerator
- Enhanced IDE Controller
- Double (2X) Speed CD ROM Drive
- Sound BLASTER Stereo Card
- 80 Watt Amplified Speakers
- 2 Serial, 1 Par, 1 Game Port
- Enhanced Kyb, Hi Res Mouse
- Over 10 Multimedia CD Titles!

Intel Pentium 66 **$1908**

Intel 486DX2-66 **$1488** VLB

Windows PowerStation

- 8MB RAM, 256KB Cache
- 540MB Hard Drive
- 1.44MB Floppy Drive
- 15" SVGA Digital Monitor (.28)
- VLB Graphics Accelerator
- Enhanced IDE Controller
- 2 Serial, 1 Par, 1 Game Port
- Enhanced Kyb, Hi Res Mouse

"The NexGen Nx586 chip is the first affordable alternative to Intel Corp's Pentium that does not involve sacrificing performance." - *PC Magazine*

IBM NexGen 586-90 **$1638**

IBM NexGen 586-75 **$1538**

Intel 486DX2-66 **$1258**

Sound BLASTER

intel inside

Best Seller

UPGRADES

- 16 MB RAM $275
- 730MB Hard Disk Drive ..... $ 90
- 1080MB Hard Disk Drive..... $275
- 17" Flat Screen (1280x1024) Mnr... $285
- 14400 Fax Modem w/Software..$ 75
- Diamond Stealth-64 VLB $130

- 3 Year Warranty [1]
- Lifetime Labor Warranty
- 30 Day Satisfaction Guarantee
- Toll Free Technical Support

VISA

INTELLICOMP TECHNOLOGIES, INC

9698 TELSTAR AVE., #310
EL MONTE, CA 91731

FAX : 818 582-8213

818-582-8096

Prices and specifications subject to change without notice. All returned items must have a Return Merchandise Authorization (RMA) number and must be in the original packaging in "like new" condition. [1] Monitors, CD ROM drives and hard disk drives carry a 1 year warranty. [2]The cost of return shipping is not included in the Satisfaction Guarantee, all shipping charges are non-refundable, opened software & opened CD titles are non-refundable

ONE STOP FOR

CUSTOM SOFTWARE PROGRAMMING

- Our consultants will help you determine your software needs and design a program that will run efficiently on your hardware and improve your productivity. We bundle, set-up and install equipment only after our consultants have identified your needs for hardware, software and training.
- We do text imaging, optical character recognition
- Our consultants will guide you towards your final solutions

MICROSOFT. WINDOWS NT. READY-TO-RUN

We've built our good name and strong reputation on supporting many different system needs. Whether you are a large corporation with a complicated network or an end-user with one system, we know how to handle your requirements. We work with our satisfied customers to identify the best system for staying productive. Occasionally systems need service and we're available to keep your systems running efficiently and effectively. Let us know what you want to accomplish with your new system and you'll see why our business grows month after month.

Network • Hardware • Software • Service & Training

LANtastic

NETWORKING, MULTIMEDIA AND BEYOND

MOTHERBOARDS W/CPU

PCI PENTIUM 90MHz (INTEL) w/256K	$959
PCI PENTIUM 90MHz w/256K	849
PCI P5-60MHz w/256K	609
PCI P5-66MHz w/256K	649
PCI 486-66DX2 256K CACHE	335
VLB 486DX2-66 256K CACHE	285
ISA 386DX-40 128K AMD CPU	119
IBM VLB 486DLC-66MHz 128K	199

VIDEO CARDS

DIAMOND STEALTH 64 PCI w/2MB DRAM/VRAM	$179/269
DIAMOND STEALTH 64 VLB w/2MB DRAM/VRAM	189/269
ATI WIN TURBO MACH 64 VLB DRAM/VRAM 2MB	189/269
ATI WIN TURBO MACH 64 PCI DRAM/VRAM 2MB	179/269
ATI Mach 64 4MB VRAM	499
#9 GXE DRAM 2MB PCI/VLB	189
#9 GXE PRO VRAM 2MB PCI/VLB	269
IMAGINE 128 BIT 4MB VRAM PCI	729
GENOA 1MB VLB	99
TRIDENT 9400 SVGA 1MB VESA	69
MGP	15

HARD DRIVES

260MB IDE/250MB	$180
20MB IDE	195
)MB IDE	219
MB.	299
1.05GB IDE	445
540MB SCSI II	279
1.05GB SCSI II After Format	545
2.0GB SCSI II	969

CONTROLLERS

ADAPTEC 1522BK (BARE)	$85
ADAPTEC 1522BK w/KIT	149
ADAPTEC 1542BK (BARE)	189
ADAPTEC 1542BK w/KIT	259
ADAPTEC 2742 BARE EISA SCSI	260
ADAPTEC 2940 (BARE), PCI SCSI	219
ADAPTEC 2842 SCSI VESA	259
ADAPTEC 2940 w/KIT, PCI SCSI	300
ADAPTEC 2940W BARE	265
ADAPTEC 2940W BARE w/KIT	360
VLB IDE I/O 2HD/2FD	29
VLB IDE 2S, 1P, 1G w/2 UART 16550 COMP. CONTROLLER 2.88MB	65
PCI SCSI CONTROLLER	85
PCI IDE CONTROLLER	29

MONITORS

14" SVGA INT. .39	$195
14" SVGA INT. .28	210
14" SVGA .28 NI F/S	220
KFC 15" NI NO DIGITAL	289
ACER 15" MONITOR DIGITAL	330
ACER 17" MONITOR DIGITAL	609
MAG MX 15F 15"	425
MAG MX 17FG 17"	799
MAG T17	939
MAG DX-15F GREEN	320
MAG DX-17F GREEN	599
NEC XE 15	CALL
NEC XE 17"	CALL
VIEWSONIC 6E 14" NI	269
VIEWSONIC 15ES	319
VIEWSONIC 15G	359
VIEWSONIC 15	429
VIEWSONIC 17E	689
VIEWSONIC 17G	723
VIEWSONIC 17	859
VIEWSONIC 21	1449

ETHERNET CARDS

NE2000 COMPATIBLE COMBO	$39
INTEL ETHEREXPRESS/ COMBO	129
3 COM C3 509 ETHERNET 16 BIT	129
3 COM ETHERLINK III PCMCIA	199
ETHERNET NOVELL	129
ETHERNET CONCENTRATOR 8 PORTS	199
ETHERNET CONCENTRATOR 12 PORTS	399

MULTIMEDIA

PACKAGE #1 ..... $249
Mitsumi/Sony/Panasonic CD ROM IDE 300KB/250ms 16 Bit Sound Blaster, 12 CD Titles, 2 Mini Speakers

PACKAGE #2 ..... $369
TEAC 4X IDE CD ROM w/16 Bit Sound Blaster 16, 12 CD Titles, 2 Mini Speakers

PACKAGE #3 ..... $459
Toshiba/Plextor 4X 3501B SCSI CD ROM 450KB/200ms w/16 Bit Sound Blaster 16 SCSI-2, 12 CD Titles, 2 Mini Speakers

Terms and Conditions: All UPS shipping charges and service fees are non-refundable. 14 day money back guarantee. 15% restocking charge before 30 days. After 30 days no refund. Printers and monitors warranty by manufacturer. CD titles and software are not refundable after opened. Prices are reflective of cash and check discounts. Prices are subject to change without notice.

QUALITY COMPUTERS, INC.
13001 Ramona Blvd., #C • Irwindale, CA 91706
Sales (818) 960-1933 • Tech Support (818) 960-6093 • Fax (818) 337-5025
Hours: Monday–Friday 9:00–6:00, Saturday 10:00–4:00, Sunday 10:00-4:00

KINGSLEY COMPUTER, INC.
15711 E. Valley Blvd. • City of Industry, CA 91744
Sales (818) 369-2295 • Tech Support (818) 369-0224 • Fax (818) 369-6818
Business Hours: Mon–Fri 9:00–6:00

TOTAL SOLUTIONS

Home Multimedia System

- 4MB RAM Intel Processor
- 256K, Pentium P24T Ready Socket
- Double Speed CD ROM Player
- 16 Bit Sound Card, 2 Mini Speakers, 12 CD Titles
- 540MB, 13ms IDE Hard Drive
- 1.44MB Floppy Drive
- Fast VESA LB IDE Controller (50x Faster than Standard Controller)
- Super VESA LB Accelerator Video 1MB (16.8M Colors & Up to 1280 x 1024)
- 14" SVGA Color Monitor NI Flicker-Free
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Enhanced Keyboard
- Desktop or Mid Tower Case
- Free Hi-Res 1450 DPI Mouse

DOS & Windows Package $90
Intel 486DX2-66MHz . .$1229
AMD 486DX2-80MHz . .$1269

1995 Multimedia System

- 8MB RAM Intel Processor
- 256K Cache
- 1.44MB Floppy Drive
- 520MB, 11ms IDE Hard Drive
- PCI Enhanced IDE Interface
- PCI Diamond Stealth 64 1MB Enhanced Accelerator
- 2 Serial, 1 Parallel, 1 Game Port
- 15" SVGA NI Color Monitor
- 101 Enhanced Keyboard
- Desktop or Medium Tower
- Free Hi-Res Serial Mouse
- Dual Fans
- 2X CD ROM, 16 Bit Sound Card
- 12 CD Titles, 2 Mini Speakers

Intel 486DX2-66MHz $1569
P5-60MHz $1879
P54C-75MHz $2029
P54C-90MHz $2129

4X Multimedia System

- 3 PCI Slots
- 256K Cache
- Intel Processor
- 8MB RAM
- 1.44MB Floppy Drive
- 540MB 13ms IDE Hard Drive
- Built-in IDE Controller
- 2 Serial, 1 Parallel, 1 Game Port
- Diamond Stealth 64 PCI w/2MB
- 15" 1280 x 1024 Flat Screen Monitor
- 101 Enhanced Keyboard
- Medium Tower Case
- Free Hi-Res 1450 DPI Mouse
- CPU Cooling Fan
- 4X CD ROM
- 16 Bit Sound Card
- 12 CD Titles, 2 Mini Speakers

DOS & Windows Package $90
Pentium P5-60MHz . . $2009
Pentium P54C-75MHz $2159
Pentium P54C-90MHz $2259

PCI Hurricane Machine

- Pentium P5 or 486/66 Intel CPU
- 256K Cache
- 8MB RAM
- 850MB IDE Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced IDE
- Diamond Stealth 64 2MB
- 15" Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- Enhanced 101 Keyboard
- Deluxe Tower Case
- Mouse
- Extra Heat Sink Fan

Intel 486DX2-66 . . . $1429
P5-60MHz $1739
P5-90MHz $1989
P5-75MHz. . . . . CALL

PCI Dream Machine

- Pentium P5 or 486-66 Intel CPU
- 256K Cache
- 8MB RAM
- 1GB IDE Hard Drive
- 1.44MB Floppy Drive
- PCI Enhanced IDE
- Diamond Stealth 64 2MB
- 17" MAG Monitor
- 2 Serial, 1 Parallel, 1 Game Port
- Enhanced 101 Keyboard
- Deluxe Tower Case
- Mouse
- Extra Heat Sink Fan

Intel 486-66MHz . . . $1899
P5-60MHz $2209
P5-90MHz $2459
P5-75MHz. . . . . CALL

Quality Computer (818) 960-1933 • Kingsley Computer (818) 369-2295

tions at this point—you can get this thing called Street Smart from Schwab. That's your most sophisticated set of users, and they're doing very high-end transactions. This is not stuff, at this point, that you do off of an ATM. They've got themselves a win there, because they've said, "What would a savvy early adopter actually *do*, and what will help my business in terms of driving demand there?" They didn't go off in the direction of "Everybody's going to pay their power bills with this." They started out with the sophisticated users and got a market fit there.

I think that other stuff does lie down the road somewhere, but it's after the point where things like email become pervasive, when it becomes commonplace to say that I went on the Net and chatted with some interesting people last night, and everybody understands it.

The Bay Area, being a hub of sophistication about this, is probably well along that curve, and probably a very good place for looking at the effects. When you can go down the road out here and see email addresses posted on the billboards, which I've seen, it says that for this community, email has passed over that fax point in terms of adoption.

When you start seeing it in the literal Peoria, then you're there. And at that point you've probably got to where home banking in its most general sense becomes a viable proposition. But it's going to be those other things—the urge to be entertained, the urge to communicate—that's going to drive it.

Where do you see the cable companies fitting in with all of this? It's very interesting to watch the culture clash, but hard to figure out where it's going.

Well, it is. It seems to be less an issue of technology and more an issue of the proverbial industries in collision and the uncertainty of regulation.

Just to put together a number of possibilities—what about DBS, digital broadcast satellite, the little dishes? They're selling like crazy. The cable companies call them Death Stars.

The reason they're worried about it is not because it's going to soak up the rural market, because they can't reach that market anyway. It's that it might soak up their premium users.

For those people that are able to put six or seven hundred dollars up on the table, which by definition is a high-end consumer and a premium user, they have the possibility of now switching to another carrier. So what's the possible effect on the cable companies?

Cream-skimming.

Exactly. It's their premium user, the one they'd like to move upscale to use interactive services. They might be taking off in one direction.

On the competitive side, one of the ways the cable companies are going to have to raise capital is based on their cash flow. If you're in the financial community, that's how you value a cable company—you look at the number of subscribers and the average take per month per subscriber and you do a big multiplication.

If DBS continues to be a hit and it's not just a flash in the pan, one of the things that's going to happen is that it's skimming the cream, potentially, off the cable companies. First it's taking the rural audience, which is okay because they can't reach them economically anyway. But if it takes the cream of the premium audience, the people that buy the movies on demand, do the interactive shopping, buy the Pay-Per-View, then what you've got is that the big-margin stuff of the cable companies goes away, which affects their cash flow, and also affects them in that it sort of removes potential audience for some of this interactivity. That could have a big negative effect.

If your audience is poor, they're not going to go home-shopping.

Exactly. They're not going to buy as many movies if they're really sensitive to the price point and how much is on your monthly bill. It means more of their revenue comes out of basic cable, and guess what, it's regulated and low-margin.

On the other hand you've got the possibility of the phone companies coming across the line. Right now there's enough uncertainty and just plain prohibition in terms of federal regs and so on. If that barrier went down, telephone industry money applied to the cable industry would be one of the accelerators, if they could figure out how to get a return on it.

Will the barriers come down so that they can easily cross-invest in broadband? In that case capital flows toward opportunity, right? Suddenly you've got phone companies buying cable companies wholesale instead of small-scale, and they basically end up running two channels in parallel. Because they can clearly capitalize the rebuilding of the backbones if they're allowed to do that.

If that doesn't happen, then you've got a roughly $80-billion industry, the phone companies and all the telephony applications, at war with a $40-billion industry, cable and the like. That's what really counts right now. All this interactive data and online services and the Internet is a very small piece compared to that major combat.

When it comes right down to it, the cable companies care more about delivering telephony, and telephone companies care more about delivering video, than either of them care about data to the home, because it's Willie Sutton again—where's the money? Look at how many zeroes are after the leading digit. Telephony and video is a big deal; the stuff that I'm involved in right now is not so big a deal.

But depending on who wins, there may be a tremendous effect on what people are actually able to bring down to the PC.

One of the biggest problems right now is that the cable companies, or more appropriately their suppliers, are using incompatible architectures. There may be some statutory requirement at some point that they have a standard for, say, doing video dialtone, or whatever the equivalent is, but for the most part, how they modulate their signal, the protocol stacks they run, the signaling conventions, are very dissimilar from one of these to the other. That's probably as it ought to be right now, because we're still working out exactly what people are going to pay for. When you figure that out, then you lock in a standard architecture that delivers efficiently what people will pay for.

The problem, from the point of view of somebody on the PC side, is: What if I have a customer who says, "I love this idea. I want really high bandwidth. I'll go over to Fry's and I'll buy my cable modem and I'll plug it in and it'll run great in Mountain View. Oops, I just got a transfer to Denver. TCI territory." A different system. Suddenly it doesn't work any more and you've got a very unhappy customer.

You're stuck there, because the only way out of that is either having an unhappy customer or that you rent it from the cable company, in which case the cable company, of course, will be very cautious in terms of how many dollars they put into that modem supply, because they don't know—it might not work three or four years from now and they might not get their money back out.

So you've got kind of what, being an old engineer, I'd call impedance mismatch, kind of a misfit between the proprietary approach to what's going into the cable architectures and the more open approach of the PC, which is how you get leverage—you do something that plugs into an open standard and runs anywhere you want it to.

One thing that would make my heart very glad—not saying that it will happen—would be if there were some sort of an agreement among the various parties to all this, to say we're going to have to carve out some area of bandwidth in these systems, we're going to standardize on a modulation scheme and standardize on a protocol stack, so I can at least have a happy customer who moves from one territory to the other. That would be a much better fit for the requirements of the PC marketplace.

So far the signs are kind of discouraging, even though people like me are attempting to beat on the cable suppliers and say, "This would make a lot more sense. Then you guys all go out there and compete on the architecture of your settops, the peculiarities and advantages of your modulation schemes, and do it all in the cable area. Compete,

KAMFOZ Computer

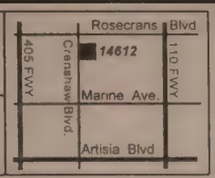
All systems come with a one year warranty, extended support & service option available. **Dealer inquires welcome**

Not responsible for typo. All product names are trademarks of their respective companies.

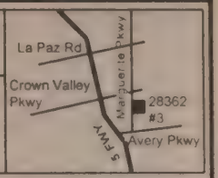
All prices are cash / check

VISA

(310) 769-1970
Gardena
14612 Crenshaw Blvd.
Gardena, CA 90249
Fax (310) 523-9190



(714) 347-9563 **(714) 347-9564**
Mission Viejo / Orange
28362 Marguerite Park Way Unit 3
Mission Viejo, CA 92691
Fax (714) 347-9565
(Next to LEXUS car showroom)



Business Hours: Mon to Fri: 9am to 6pm
SAT: 10am to 4pm

486DX2-66 Computer W/Multimedia Super Package

- *486DX2-66 VLB Intel CPU w/256k cache
- *Pentium Over Drive ready ZIF Socket
- *3 VLB, 4 ISA slots, Green Feature AMI bios
- *4 MB Ram 70ns 72 pin
- *420 MB IDE Hard Drive
- *SVGA vlb 1MB Card 1024X768
- *AT I/O IDE Card VLB 2S 1P 1G 2HHD 2FDD
- *Mini Tower Case w/ps
- *1.2 & 1.4 Floppy Drive
- *101 BTC key board
- *SVGA NI .28 14" full screen monitor
- *Microsoft Compatible Mouse
- *Panasonic Double Speed CD Rom
- *16 Bit Stereo Multi CD Sound Card
- *4 watts Speakers
- *1 Encyclopedia CD Compton

UL & FCC Class 2 Approved

$1237.00 W/Multimedia

$1057.00 System Only

COMPAQ PRESARIO SYSTEM

3-Year Warranty

System comes with:
*Multimedia Double speed CD
*16 bit Stereo Sound Card
*Phone Center (speaker phone)
*14.4 Fax/Modem
*TV Ready
*Video tape ready
*15 Software Library

Presario 520 TVCD

- *486-SX2-66 26% more performance than DX2-50
- *4 MB ram (up to 64 MB)
- *420MB Hard Drive
- *1MB SVGA 256 Colors
- *1.44 FDD 3 1/2"
- *Desktop case w/ps
- *Key board / Mouse
- *SVGA monitor.28 1024X768
- *Fax/Modem, CD Rom, Sound card,TV

$1599.00 With MONITOR

Software Library:
MS-Dos 6.2-Microsoft windows 3.1-Tab Works-Media Pilot-Welcome Center-Microsoft Encarta CD- Microsoft Works-Quicken for Windows S.E.-Prodigy-American Online-CompuServe-ImaGination Network-Home Survival Toolkit-Kidsoft CD,including Dream Team Basic Spelling Tricks, Dream Team Early Math,and Crayola Art Studio

Presario 920 TVCD

- *486-SX2-66 26% more performance than DX2-50
- *8 MB Ram (up to 100 MB)
- *420MB Hard Drive
- *1.44 FDD 3 1/2"
- *Tower case w/ps
- *Key board / Mouse
- *1MB SVGA 256 Colors (up to 2MB)
- *Fax / modem, CD &Sound card, TV
- *W/O Monitor

$1749.00 W/O MONITOR

Presario 924 CDS

- *486-DX2-66
- *8 MB Ram
- *525MB Hard Drive
- *1.44 FDD 3 1/2"
- *Tower case w/ps
- *Key board / Mouse
- *1MB SVGA 256 Colors (up to 2MB)
- *Fax / Modem, CD & Sound card
- *W/O Monitor & TV

$1795.00 W/O MONITOR W/O TV

COMPAQ Monitors

- *14" MULTIMEDIA SVGA 0.28 1024X768 COMPAQ MONITOR.....$395.00
- *14" MONITOR W/O MULTIMEDIA 0.28 1024X768.....$285.00
- *14" N.I. MONITOR W/O MULTIMEDIA 0.28 1024X768.....$355.00
- *15" MONITOR SVGA MULTIMEDIA 0.28 .....$485.00
- *15" MONITOR SVGA W/O MULTIMEDIA $445.00

CPU

586-CPU

INTEL 586-90 Mhz CPU	$599.00
INTEL 586-66 Mhz CPU	$499.00
INTEL 586-60 Mhz CPU	$419.00

486-CPU

INTEL 486-DX4 100 MHZ	$399.00
AMD 486-DX100 MHZ	$245.00
AMD 486-DX80 MHZ	$199.00
INTEL 486-66 DX2	$199.00
NTEL 486-DX33	$149.00

Special HARD DRIVES

420MB IDE *MAXTOR / CONNER / QUANTUM*	$179.00
540MB IDE *MAXTOR / CONNER / QUANTUM*	$199.00
730MB IDE *QUANTUM*	$259.00
850MB IDE *CONNER*	$279.00
1.2 GB IDE *CONNER*	$435.00
540MB SCSI *CONNER*	$229.00
1.6 GB SCSI *QUANTUM*	$479.00
2.0GB SCSI *CONNER/QUANTUM*	$879.00

SIMMS MEMORY

ALL MEMORIES ARE NAMEBRAND

256 K SIMMS 80ns	$ 11.00
1Meg SIMMS 70ns 30 PNN 1X3	$ 38.00
4Meg SIMMS 70ns 30 PIN 4X9	$139.00
4Meg SIMMS 70ns 72pin 1X32	$149.00
4Meg SIMMS 70ns 72pin 1X36	$169.00
8Meg SIMMS 70ns 72pin 2X32	$289.00
8Meg SIMMS70ns 72pin 2X36	$320.00
16Meg SIMMS 70ns 72pin 4X32	$449.00
16Meg SIMMS 70ns 72pin 4X36	$529.00

586-90MHZ PENTIUM PCI / VLB

$1899.00 W/O MONITOR

- *586-90MHZ OPTI CHIPSET 2VLB, 3PCI, 2 ISA 72PIN SIMMS SOCKET, ZIF SOCKET, 256K CACHE UPGRADE TO 512K 585-90 PENTIUM INTEL CPU
- *16 MB RAM 72 PIN
- *540 MB HD IDE
- *1.2 &1.44 MB FDD
- *PCI AT I/O + IDE CARD 2S-1P-1G-2HDD-2FDD
- *PCI 64 BIT KELVIN 1MB CARD UPGRADE TO 2MB
- *KEYBOARD 101 B.T.C. ENHANCE
- *MINITOWER CASE W/P.S.
- *MICROSOFT COMPATIBLE MOUSE

NETWORK CARD

NE-2000 16bit PCMCIA.16 Bit	$149.00
NE-2000 3in1 32Bit VESA	$ 86.00
NE-2000 Pocket size 2in1	$129.00
NE-2000 2in1 16Bit	$ 39.00

VIDEO CARD

ISA VGA 256K Video Card	$ 29.00
ISA VGA 512K Video Card	$ 39.00
ISA SVGA 1 MB Video Card	$ 59.00
VLB SVGA 1 MB 1024X768	$ 75.00
VLB SVGA S3 Chip1024X768	$ 85.00
Diamond Stealth Video Card	
PCI /VLB Diamond Stealth 64bit w/1MB D Ram (upgradable to 2MB)	$139.00
PCI /VLB 64bit W/2MB D Ram	$179.00
PCI /VLB 64bit 2MB V Ram (upgradable to 2MB)	$139.00
ATI GRAPHIC	
PCI/VLB 64 bit 1MB DRam(upgradable to 2MB)	$135.00
PCI/VLB 64 bit 2MB DRam	$199.00
PCI/VLB 64 bit 2MB VRam (upgradable to 4MB)	$285.00

I/O CARD

16bit AT I/O 2S,1P,1G	$ 13.00
16bit AT I/O & IDE 2S,1P,1G,2HDD,2FDD.	$ 15.00
VLB AT I/O & IDE 2S,1P,1G,4HDD,2FDD...	$ 25.00
VLB AT I/O&IDE4+4SUPPORT2.88HI/SPD	$ 55.00
VLB 6360 Adaptec SCSI card	$ 99.00
Intel PCI IDE card w/cable	$ 39.00
PCI SCSI NCR card	$ 99.00
PCI IDE & I/O enhanced controller	$ 39.00
SCSI to parallel port adapter	$ 99.00
Mode2 Enhanced VLB IDE I/O	$ 39.00
SCSI ISA Controller Card	$ 65.00
VLB IDE/FDD Caching Card (DC680T)	$139.00
VLB SCSI/FDD Caching Card (800)	$385.00

FAX / MODEM

9600/2400 Fax/Modem internal	$ 29.00
14,400 Fax/Modem internal	$ 59.00
9600/2400 Fax/Modem/Voicemail	$ 69.00
14,400 Fax/Modem/Voicemail	$ 87.00
14,400 Fax/Modem/voicemail/pager	$129.00
28.8 Fax/Modem internal	$139.00
14,400 Fax/Modem/external	$139.00
28,8 fax/Modem external	$169.00
14,400 fax/Modem PCMCIA	$130.00

Special MONITORS SHAMROCK

FULLSCREEN W/GREEN FEATURE

- **14" SVGA 1024X768** .39 30-38KHZ.....$189.00
- **14" SVGA 1024X768** .28NI 47-50KHZ.....$215.00
- 1501 **15" SVGA 1280X1024** .28NI 24-64KHZ Non Digital.....$279.00
- 1502 **15" SVGA 1280X1024** .28NI Micro Processor Control.....$295.00
- 1502L **15" SVGA 1280X1024** .28NI Micro Processor Control.....$320.00
- 1703 **17" SVGA 1280X1024** .28NI Digital 24-64KHZ / 47-104KHZ.....$549.00
- **1702 17" SVGA 1600X1280** .26NI Micro Processor Control (20 programable digital control memory) 24-82Khz 9pin D-Sub & 5 BNC.....$649.00
- 1702L **17" SVGA 1600X1280** .26NI Micro Processor Control (20 programable digital control memory) 24-82 khz 9pin D-Sub & 5 BNC Low Radiation.....$669.00
- 2002L **20" SVGA 1600X1280** .28NI Micro Processor Control.....$1079.00
- 2102L **21" SVGA 1600X1280** .28NI 30khz-82khz 9pin D-Sub &5 BNC Connectors, Digital Control and with more other features.....$1379.00

ACCESSORIES

MiniTower case w/ps 230w...	$ 39.00
MidCompact case w/ps	$ 55.00
MidTower case w/ps 230w....	$ 65.00
Desktop case w/ps 230w.....	$ 49.00
FullTower case w/ps 250w....	$ 75.00
1.2 MB FD 5" 1/4	$ 45.00
1.44 MB FD 3" 1/2	$ 35.00
Key Board 101BTC	$ 17.00
Key Board Focus 2001	$ 39.00
Key Board Focus 8000	$ 45.00
Mouse Generic	$ 9.00
Microsoft mouse 2 buttons...	$ 43.00
420 MB Tape Backup Conner	$175.00
250 MB Tape Backup...."	$149.00
T.V. tuner(watch TV on your monitor)	$139.00

Super Deal

Multimedia kit

Double speed CD Rom Panasonic, 16 bit MCD Stereo Sound card, 4 watts Speakers, 1 Encyclopedia CD.

$199.00

Sound Blaster Discovery 16

Panasonic Double speed CD Rom, Sound Blaster16 Bit card, Microphone, 4+4 watts Speakers, 15 CD titles included microphone.

$239.00 **$279.00** Digital School Haugh

CD ROM Drive

Sony / Mitsumi double speed IDE	$119.00
Panasonic double speed	$129.00
Toshiba 4X speed SCSI	$285.00
TEAC QUAD 4X AT	$225.00
Mitsumi Quad speed 4X IDE	$219.00
Sony/Mitsumi/Panasonic interface card	$ 15.00

Sound Card

Sound Blaster 16 MCD	Creative	$ 89.00
Sound Blaster 16 SCSI	Creative	$129.00
Sound Blaster 32 BIT	Creative	$275.00
16 Bit MultiCD sound card by Opti chip		$ 75.00
SPEAKER NORMAL 2+2 Watts		$ 12.00

SOUND IMPRESSION by BOCA
FAX / MODEM / VOICE MAIL 14,400 & 16 BIT STEREO MCD + IDE SOUND CARD ALL IN ONE $179.00

MOTHER BOARDS W/CPU & CACHE

386-SX/DX

- **ISA 386-SX40** W/CPU.....$ 59.00
- **ISA 386-DX40** 128KCache w/CPU.$ 95.00

486-SLC & DLC

- **ISA 486-33SLC** TI CPU OK cache$ 83.00
- **VLB 486-DLC 40 MHZ** w/CPU & w/128K Cache & Math CO..... $157.00
- **ISA 486-DLC 40MHZ** W/CPU W/128K CACHE & Math Co..... $139.00

IBM SLC

- **VLB IBM 486-SLC 2 66mhz** 64K Cache w/ CPU Math CO..... $ 169.00
- **ISA IBM 486-SLC 2 66MHZ** 64K Cache w/ CPU Math CO..... $ 154.00
- **VLB IBM 486-SLC 3 75mhz** 256K Cache w/ CPU Math CO VLB IDE I/O BUILT IN , ZIP SOCKET..... $ 239.00

486-DX

Special

- **VLB 486-DX2 66 MHZ INTEL** CPU W / mother board, 3VLB, 256K Cache,Upgradable to 64 MB Ram, 30 pin& 72 pin,GREEN, Zip Socket..... **$ 279.00**
- **VLB/PCI 486-DX2 66 INTEL** CPU 256K Cache..... $ 339.00
- **VLB 486-DX33 MHZ W/Intel CPU**, 256K Cache,zip socket..... $ 239.00
- **486-DX66/50/33/40/25SX/DX VLB&ISA** 256K Cache, ZIP SOCKET, Green, Mother Board ONLY (Support DX-100mhz & 80mhz CPU)..... $ 99.00

586 DX PENTIUM

W/O CPU

- **586-66 MHZ** ,4 PCI-2 ISA-2 VESA,AWARD BIOS, 256k cache (upgradable to 512k cache), 72pin 4 slot ..... $ 229.00
- **586-66 MHZ** 3 VLB-5 ISA 256K Cache (upgradable to 512k),Award Bios..... $ 179.00
- **586-90 MHZ** 2 VESA, 3 PCI, 2 ISA SLOTS 256K Cache (upgradable to 512K) 72 PIN 4 SLOTS..... $ 266.00
- 586-90 MHZ INTEL NEPTUNE CHIP Mother board,built in IDE+I/O, PCI+ISA slots. 256K cache..... $ 360.00
- 586-90 MHZ INTEL PALATO, PCI & ISA, 256k CACHE..... $ 289.00

and may the best man win."

At that point you start worrying about de facto standards, once you've figured out what gets paid for, what's the best fit to that.

There are a number of other real uncertainties as to how stuff that comes down a broadband pipe gets marketed. We don't believe in the vision that says it's all going to come over your settop.

Why?

There's a distinction you can make between what I'd call lean-forward and lean-back audiences for this kind of stuff. The venue of the living room is the lean-back: I'm home, I'm tired, I want to be entertained.

It's essentially passive.

It's essentially passive, right. And you've got a number of other factors.

The way that the television works is not well suited for input. The social environment there is not well suited. Are you going to compose personal email on that screen with the kids sitting around and watching it? Are you going to chat with your sister?

On a 40-column screen....

Exactly. So it's just not well suited.

There's no technical reason why that kind of functionality can't partition onto the PCs, which I call the lean-forward, the engaged market. For people that want to decide what information they want to get on demand, for people that want to talk to other users privately, there's already a device of choice for doing that. There's no reason you can't have a cable modem snaked out one side of your broadband feed, just as you'd have the settop coming out the other side.

There's also some financial subtleties in this, in that the cable companies, under the current convention, basically buy those settop units, the ones you need to get movies, and capitalize them and put them on their balance sheets, and then they rent them out to you. That means they're taking a balance-sheet risk every time they do that—they're making a bet that they can get their money back out of that device because you're going to use more services over a period of time.

That's one of the reasons that everybody in the industry knows, for instance, that the Orlando settop device and the ones being used out in Castro Valley are not practical. They're very, very much too expensive. The cable companies understandably are resistant to pushing up the costs they pay for one of those devices much beyond the $100, or for the most extravagant, $200 price point.

Particularly since their customers are screaming about the rates anyway.

Exactly. The last thing they want to do is have to push up that basic bill, which produces a lot of push-back.

They're also faced with the problem that they don't know the actual rate of return on doing things like video-on-demand, interactive home shopping, and so on. So they're, to some extent, between a rock and a hard place, and have the possibility that, given the rapid advance of technology, they could make a bet on somewhere around a hundred thousand $200 devices and find out they're not getting their money back.

Now, look at it from my point of view, coming in from the PC. I have the very nice position where my customers go down to CompUSA and essentially buy my delivery devices for me, because they get a lot of other uses out of it as well. They could do their checkbook, they could fiddle with graphics, they could play games, they could do anything they darn well please. I haven't got that problem. I don't have to capitalize that device.

And that device gets more capable year by year on an exponential scale. Thank heavens for the Valley and competition.

God bless Gordon Moore!

[*laughs*] Yes! The law still works! Those curves keep on a-running.

We've now got a very clear proof that the market will not only bear that acceleration of demand, but in fact they'll re-buy in order to get more capability periodically.

Basically the old iron stacked up is getting replaced. That's one of the things that we've seen in the last couple of years, is that the people who bought in early will re-buy if they see a possibility of getting something new.

Contrast that to the situation of the cable operator that maybe put that stuff on his balance sheet as seven-year property. Now it's two generations along and it looks pretty silly compared to the competition. That's one of their risks, that in a rapidly evolving technology market, that churn that makes the money for the PC companies hurts the cable company.

So we think it's going to partition out very early, that people who want the high-interactivity stuff will tend to gravitate onto the PC because they're there already. And if you look at the relative growth curve of broadband installation versus PC adoption, I don't see exactly how you can make those cross. The PC is going to be there first.

Now, there may be some fusion media, and to me this is one of the most intriguing things about what we're going through right now. We, for instance, have a joint venture going on with CNN, where they have a program called *Talk Back Live*.

They try to get not only live interaction with the audience, but also live and canned-up reaction via fax and via email. We support a forum for that. People are told in advance who the speakers are going to be, and what some of the issues are, and they can send things in, and they can also do it live.

I don't usually have enough time to sit around and watch this thing, but I ended up at home sick a few weeks ago, and actually flipped it on while Newt Gingrich was on, which was one of the more lively shows. When I went and checked the forum, yes indeed, there was probably more traffic in that particular topic than most of the others.

So one of the possibilities that may be coming out here is that you end up with a hybrid medium that nobody really thought about in advance. You've got TV being good at what it's good at—basically packaging things and broadcasting them out. There you've got the MC, you've got the guest of honor, you've got sort of the commons of the program being blasted out there. The back channel is going through a medium like us, through a computer.

One of the possibilities is all this interactive TV is in fact two things, side by side. TV coming down one pipe, the interaction happening on another one.

Then you've got the possibility, as the technology advances and once we've worked out the rights issues, of being able to say, "Here's where Newt gave that really controversial answer. Let's just put that up online."

Now, is that video on demand? Maybe it's clips on demand. It's the logical extension of doing things like downloading and searching for news stories. And then you can react to that. That's one of the interesting possibilities, that this broadcast channel may become a springboard for interactive discussion.

Very shortly thereafter Gingrich was giving his speech about how they were going to put this THOMAS system up, to expose in public all the bills going into the hopper and all the interactions. So now you've got the possibility that you might have C-SPAN, which won't go away, showing you the public proceedings, and you've got the back channel going through the computing medium. From a point of view of somebody that likes to step back from the industry occasionally and think about where it's all going as far as a medium, this is one of the most intriguing possibilities, that TV used at its best may be complementary to online used at its best. If you try to combine the two, you get a train wreck, if you try to drive them down the same channel and with the same business structure.

So they kind of evolve in parallel.

That's one of the possibilities.

What are some of the others?

The ghost of ISDN gets up and walks. I'm not saying that's a for-sure, but you may be getting into a situation where there's a sufficient demand driver. It might be called the Internet and online.

Twenty-eight point eight is virtually upon us; we've got 28.8 dial-in modems in the lab, shortly to deploy, and we are very close to hitting the wall in

FUTURE COMPUTING SOLUTIONS INCORPORATED

HEWLETT PACKARD Authorized Dealer · COMPAQ Authorized Dealer · In Touch with Tomorrow TOSHIBA · Authorized Reseller · IBM Authorized Dealer · SHARP Authorized Dealer · NEC Authorized Dealer · AST Authorized Dealer

Installation • Administration • Training • Service • Support

Novell Certified NetWare Engineer

- Novell Certified Engineer
- Complete Hardware & Software System Integration
- Network Upgrade & Maintenance
- Cabling

T4900CT: The Advanced Multimedia Notebook

- Blazing Fast 75MHz Intel DX4
- Multimedia Ready: 16 bit WAV & MIDI Audio, built in Microphone and Speaker, Audio Jacks, and Pre-installed Windows Sound System.
- 810MB Hard Disk Drive
- 8MB of Standard RAM
- Pentium 75MHz

75MHz $CALL

T3600CT

50MHz, i486DX2, PCMCIA Active Color

250MB $3298

Apple Power Macintosh 6100/66

$CALL For pricing and configurations

NEW

Power Macintosh 7100/80

80MHz Power PC 601 Microprocessor

$CALL For pricing and configurations

The Ultimate Combination of Sight, Sound & Processing Power in a Notebook Computer

T4800CT

75MHz, i486DX4, 8MB, **Active Color,** 2 PCMCIA Slots

510MB $4798

T4700CT

50MHz, i486DX2, 8MB, **Active Color,** 2 PCMCIA Slots

320MB $3298

T1960CT

50MHz, i486DX2, 4MB, DOS, Win, Mouse, PCMCIA, Active Color

200MB $2598
320MB $2748

T1960CS

50MHz, i486DX2, 4MB, DOS, Win, Mouse, Color, 1 PCMCIA Slot

200MB $2198
320MB $2298

POWER BOOKS

PB 520 4/160	$2088
PB 520C 4/160	$2678
PB 520C 12/320+Modem	$3588
PB 540C 4/320	$3848
PB 540C 12/500+Modem	$4648

Power Macintosh 8100/100

100MHz Power PC 601 Microprocessor

NEW

Power Macintosh 8100/110

110MHz Power PC 601 Microprocessor

NEW

CALL For pricing and configurations

T 4400SX

25MHz, 486SX, 2MB, DX Upgradable Notebook

80MB $898*
120MB $998*

*Factory Refurbished

T2450CT

75MHz, i486DX4, 8MB, Dos, WIN, Mouse, SCSI, PCMCIA, Active Color, 500MB

500MB $4598

T3400CT

33MHz, i486SX, 4MB, PCMCIA, 4.4 lbs., **Active Color**

120MB $1798
250MB $2098

T6600C

Advanced Portable Computer 66MHz, i486DX2, 8MB, **Active Color**

510MB $CALL
510MB-CD $CALL

POWERBOOK DUO SPECIAL

Duo 270C 4/240 Active Matrix Color

68030/33MHz $2288

Quadra 630

33MHz 68040 CPU

Power PC Upgradable

4/250 $1078

POWER PC SPECIALS

6100/60 8/160	$1128
7100/66 8/250-CD	$2078
7100/66 16/250-SW	$2548
7100/66 8/500-CD	$2228
7100/66 16/500-CD-AV	$2728

T1910CS

33MHz, i486SX, 4MB, DOS, Win, Mouse, PCMCIA, Mono/Color

200MB $1348
200MB/CS $1698

T4400DXC

i486DX, 25MHz, 9.5"ActiveColor

200MB $1898

T4500C

i486SX, PCMCIA, Active Color

120MB $1498*
200MB $1598*

*Factory Refurbished

T6400MM/C

Advanced Multimedia Computer, 50MHz, i486DX2, 4MB, Active Color, Mambo Card, Multimedia Software, Speakers, Samsonite Case

200MB $4998

T1900 Mono/Color

20MHz, 486SX, 4MB, DOS, Win, Mouse, Claris Works, Lotus Organizer, Case

120MB $1098*
120MB/C $1298*

*Factory Refurbished

GREAT DEAL! THINKPAD 510CS 4/200 $1698

IBM THINKPAD

300/350/360/500/750/755

MONOCHROME & COLOR

CALL FOR PRICE

T2400CT

50MHZ, i486DX2, 8M, DOS, Win, Mouse, SCSI, iPCMCIA Slots Active Color

250MB $2898
320MB $3098

T2400CS

50MHZ, i486DX2, 4M, DOS, Win, Mouse, SCSI, i PCMCIA Slots, Color

250MB $2448
320MB $2598

T1950CT

40MHZ, i486DX2, 4M, DOS, Win, Mouse, PCMCIA, Active Color

200MB $1998*
320MB $2198*

T1950CS

200MB $1898*

*Factory Refurbished

T4700CS

50 MHZ, i486DX2, 8MB, Color, 2 PCMCIA Slots,

200MB $2898*
320MB $2998*

*Factory Refurbished

Absolutely Guaranteed Low Prices

THERMAL-TRANSFER/PHASE-CHANGE/DYE SUBLIMATION PRINTERS

TEXTRONIX® Phaser 200e

- Highest Quality 300dpi
- Ideal Low cost color
- High Quality Thermal-transfer

$CALL

TEXTRONIX® Phaser 220e

- World's first 600x300dpi
- 8MB standard memory
- Thermal-Transfer

$CALL

TEXTRONIX® Phaser 220i

- Great for overhead transparencies & reports.
- The Phase 220i was named PC Computing's BEST NETWORK COLOR PRINTER in June 1994
- 10MB standard memory

$CALL

TEXTRONIX® Phaser 300i

- Phase-change technology
- Color printing on any paper
- 10MB standard memory
- 39 Resident fonts

$CALL

TEXTRONIX® Phaser III PXI

- Rich vibrant color printing on any paper
- TEXTRONIX® phase-change color printers are the world's most award winning color printers

$CALL

TEXTRONIX® Phaser 480

- Dye sublimation
- MacWorld editor's choice July 1994
- 32MB standard memory
- Features large format output big enough for two page spreads with full bleeds

$CALL

TEXTRONIX® Phaser 440

- Dye sublimation
- Standard memory
- Single-page output large enough for full-bleed images

$CALL

TEXTRONIX® Phaser II SDX

- Highest quality 300dpi
- Prints photo realistic colors on letter & legal sized media
- High Quality di-sublimation continuous tone output

$CALL

SALES ❖ SERVICE ❖ RENTALS ❖ LEASING

CONCERTO 4/25

75MHz, idx4, 8MB, 2 PCMCIA Slots, DOS, Win, Mouse, Active Color

120MB $1198
250MB $1298

CONCERTO 4/33

33MHz, 486SL, 4MB, 2 PCMCIA Slots, Keyboard & Pen-based

250MB $1448

DESKPRO XE 466

66MHZ, i486DX2, 8MB, DOS, Win, Mouse, TW

525MB $2088

DeskPro XE 450

50MHz, i486DX2, 8MB, DOS, Win, Mouse, TW

340MB $1888

CALL FOR TEXTRONIX ACCESSORIES IN STOCK!

Now printing, faxing, and copying from a home office near you.

HP OfficeJet $788

HP Fax-950 $798

❖No More Flimsy Thermal Faxes to recopy
❖HP Quality & Reliability

Laser color your whole office can share. The speedy, new HP Color LaserJet printer from FCS.

HP Color LaserJet Printer

- Fast Color printing at up to 2 ppm
- Fast Black/monochrome printing at up to 10ppm
- Features eight full colors and millions of halftone colors

$CALL

FCS Presents the New Standard in Laser Printing from HP

HP LaserJet 4 Plus Printer $1378

HP LaserJet 4M Plus Printer $1898

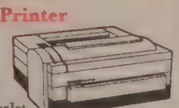
- 600dpi print quality at a 300dpi price
- Fast 12-ppm printing for Complex Documents
- Full Network Capabilities (w/options)
- Optional Duplex Printing

FCS Makes Great Performance Affordable With the HP LaserJet 4L Printer

HP LaserJet 4L Printer $538*

*With $100 Mail-In Rebate

HP LaserJet 4ML Printer $978



- 300dpi text & graphics w/ 1MB Memory
- Lowest Priced HP LaserJet Printer...EVER!

Now, See Why Color Printing is practical for Your Everyday Document.

HP DeskJet 1200C $998

HP DeskJet 1200C PS $1548

- LaserJet Compatible for Convenient Document Portability
- Easy Set-Up w/ built-in Support for Windows & PC Applications.

Big Budget Looks, Small Budget Price

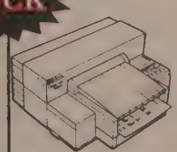
HP DeskJet 540
HP DeskWriter 540 $288

IN STOCK

- Laser-Quality Printing at a Dot Matrix Price for Affordability. 600 x 300 DPI up to 3-ppm output

Price Breakthrough on the HP DeskJet 560C Printer!

HP DeskJet 560C Inkjet Printer $478



HP DeskWriter 560C Inkjet Printer $478

- 600x300 dpi. Black & Color Printer, 35 Scaleable True Type Fonts

What are you waiting for? Get documents in half the time with the new 16-ppm HP LaserJet 4V/MV printer, now at FCS

HP LaserJet 4V Printer $CALL

HP LaserJet 4MV Printer $CALL

- 16-ppm engine and 33-MHz RISC processor for faster printing
- Wide-format printing on 11" x 17" paper
- HP Quality and reliability

FCS Presents the HP DeskJet Portable Printer for People on the Go.

HP DeskJet 320 $298

HP DeskWriter 320 $298

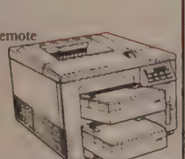
- 300dpi, Laser-Quality Printing
- Up to 3ppm, 100 pages per single charge
- Weight just 4.4lbs. Color Option add $38

SPECIAL

HP LaserJet 4Si Printer
HP LaserJet 4Si MX Printer

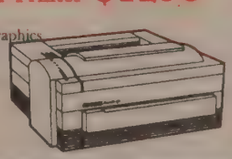
- True 600x600 dpi printing w/ REt & microfine toner
- HP JetAdmin allows easy remote operation Novell NetWare

IN STOCK



HP LaserJet 4P Printer $928
HP LaserJet 4MP Printer $1298

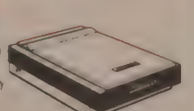
- 600 dpi Text and Graphics
- 4 pages per minute



FCS Introduces a New Revolution in Scanning

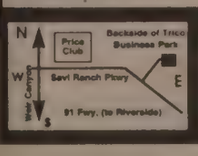
HP ScanJet IIcx Scanner $798*

- Ideal for both Monochrome & Color graphics & text
- 400dpi high quality resolution
- Enhanced OCR Accuracy w/HP Accu-Page Technology



HP ScanJet 3P $488

*With $150 Mail-In Rebate



Mon.-Fri. 8-5
Closed Sat.-Sun.

Future Computing Solutions Inc.

22835 Savi Ranch Pkwy, Ste. C, Yorba Linda, CA 92687

Tel:714/282-9100 • Fax:714/282-9400

Advertised Prices Reflect 3% Cash Discount. Corporate & Aerospace Purchase Orders accepted. Prices & Availability subject to change without notice. Additional discounts to qualified faculty & research staff. FCS is not responsible for any typographical errors. Apple, the Apple logo, AppleTalk, LocalTalk, Macintosh, Centris, Duo, PowerBook, and Quadra are trademarks of Apple Computer, Inc.

terms of what you can do with an analog twisted pair. We're finding out, depending on the characteristics of the local loops and switches and so on, that not everybody is actually going to get benefit out of that 28.8.

So boom!, we hit the wall. And at the same time we've got everybody out there making Web pages and making enhanced menus on CompuServe... There's enough interest out there, enough material being produced, both on the commercial services and at the amateur level, that people are going to say, "All right, what's next? I can't wait for the multi-billion-dollar investment to be made to get broadband, true fiber coax broadband."

So there is the possibility that there's a need to be filled. Now the question is, Who will step forward to make ISDN really transparent? It's a usability problem—can you get it to where it's at least as simple or simpler to install than a conventional modem? That's the real problem. It's really a matter of your amateur user knowing how to plug it in and use it.

Right now even network specialists still have trouble.

Well, yes. Having lost a darn good engineer down that hole for a couple of weeks once, it's not a task for the faint of heart at this point, including for companies that know a good deal about networking.

So to me that's the big question—can somebody make it usable in time to catch the possible wave of interest that can come out of things like the Internet in its more intensely graphic component? Is there a window of opportunity then before the true hybrid broadband pops in?

Because if nobody steps forward and makes it usable, we'll all just go to 28.8 and sit around and wait, unless people have wired connections or dedicated 56es or T1s.

One possible piece of optimism at this point is that if you're a modem manufacturer, exactly where do you have to run? The 28.8 stuff came out so fast it discoordinated, because they had to run from 14.4 because there's no margins left. By this time next year there won't be any margins at 28.8, so what exactly *do* you do if you're a modem manufacturer?

They have an incentive of saying, "Let's go at least give this ISDN a try, and try and simplify that." One of the problems being that it's not just a plug-it-into-the-wall and plug-it-into-your-PC thing any more; you've got to fool around with the actual home telephony wiring. That's an interesting little problem, since the phone companies have more or less thrown up their hands in terms of the internal wiring—it's a for-pay job, and not a cheap one either.

That is the basic hurdle—not the technology, it's getting the installation down.

What impact is the boom in home computing having on the online world? Your historic strength on CompuServe, for instance, has been in the technical forums.

We're trying to broaden out now, to people that are more in the midrange, people that are going to use the thing as a means to an end.

On the computer side, that was the kind of thing you started seeing when desktop publishing took off. Where people were basically saying, "Oh, I could use this, and I could replace a very expensive phototypesetting setup and get my work done. I don't particularly care how many megabytes, except that it always seems to want more, but I can get my work done."

Then you started getting that category online to some extent, people that didn't necessarily want to talk about the ins and outs of UNIX, but instead they want to talk about the latest hacks on Photoshop. Or they want to trade stocks, or they want to get research information on particular companies, that type of stuff. That crowd to some extent has come on, and we've done okay on those. So have some of our competitors.

Now you're starting to get into the tier that basically don't know and don't want to know about the technology. They're in it for fun, in many cases, or to achieve a very focused end. This is the class of people that run game machines, right? They don't particularly care what's in that box, except it seems they always have to keep buying a new one to get the latest stuff, but mostly what they want is entertainment. Or people that punch an ATM—they've got no idea what's behind there, all this huge worldwide network with crazy technology inside it—I punch things in, money comes out, I get a statement.

That's the kind of people that are now beginning to buy PCs. Because they now come widely available with modems and bundled-in software from companies like ours, they're coming online too. That's going to force a simplification of the services. It already is, in the case of some of our offerings and some of our competitors' offerings. People can find in one place stuff that more or less addresses a particular end. Whether they're interested in the movies, for instance, or they want to chat with other people, find it all in one place and just get that done.

And the Internet will evolve in that direction, too, inevitably. We're just now moving out from the people that are basically the gearheads, the early adopters that would put up with the UNIX command lines and the occasional crash and having to know what a DNS is or having to type in an IP address by hand occasionally.

The Web is one of the things that's really changed that. People can now go out there, put up something, however inexpertly—it looks an awful lot like the early days of desktop publishing all over again—but they can put their stuff up, and other people can see it, and interesting things are beginning to happen. So the Internet's now beginning to move through that same pattern.

You can look out into the future and say that at some point out there you will have the people that don't know and don't even *want* to know about what the Internet is that are going to be using it. By then probably the hype will have died down and it will be called something else, but they'll be on the Internet. They'll be using it for a very particular purpose—to entertain themselves, to communicate with other people, and they'll use it in a very focused way, much as you use an ATM right now.

What we're already seeing, and I'm sure PC manufacturers are seeing the same thing, is that there's a younger group of people moving up and beginning to buy machines, go online, that grew up with game machines. They never knew a world without Pong. Or even Mario for that matter.

From the point of view of somebody wanting to do one of these widespread well-accepted services—the advantage is that those people are fearless. They're used to, from childhood, picking this stuff up, and if I can't figure out what to do with it, well, I'll just bang on it. And eventually I'll figure out that secret code that lets me get so many more levels, or whatever.

But I can't break it.

As long as you can figure out how to meet that set of expectations, to some extent you can count on people that aren't scared of the technology that will barge around (that's an [Apple Fellow] Alan Kay-ism) and find things, and will be a lot less worried about the fact that they're dealing with technology. Any more than people of your or my age worry about the fact that if we pick up a touchtone phone or go out and go to a stoplight, that we're dealing with technology. In fact, we're dealing with very complex switching systems in both of those cases and we don't even think about it.

There's a whole set of people now that deal with very complex technologies of an interactive sort and don't even think twice about it. It's always been there.

And also I should give fair credit to people who are maybe a little further up in years. People will put up with a fair amount of manipulation if it lets them get something done, if they can see they're making progress. But you can't get a system bomb up there too often, or a GPF over in your Windows system. You really do have to make it bulletproof, because they're not very forgiving.

There probably still exists a tape in the archives at Apple of a fifth-grader reading Bill Atkinson the riot act about what was wrong with HyperTalk, and doing a very cogent analysis of the whole thing.

That's when you want to get them if you're critiquing a project—they're old enough to have an opinion and too young to be socialized against telling you what it is. One of the advantages I've

continued on page 118

U.S. COMPUTER DISTRIBUTION
Wholesale to the public !!

Custom Systems Available w/2 Year Warranty

Tel : (714) 841-4081 Fax : (714) 841-4262

HARD DRIVES

MAXTOR	340MB ID3 12MS, 96K CACHE	$ 170
MAXTOR	420MB	$ 189
IBM	365MB	$ 165
IBM	1GB SCSI	$ 585
IBM	2GB SCSI	$ 989
WD	340MB IDE	$ 170
WD	420A 420MB IDE	$ 175
WD	540MB IDE	$ 205
WD	WDAC2200A .1GB IDE	$ 410
SAMSUNG	560MB IDE	$ 185
SAMSUNG	426MB IDE	$ 165
CONNER	420MB	$ 170
QUANTUM	340MB IDE	$ 175
QUANTUM	540MB IDE MAVERICK	$ 205
QUANTUM	540MB SCSI-MAVERICK	$ 229

**** We Carry All Brand Name Drives ****

Cases & Keyboards

MINITOWER
5 BAY/230 WATT P.S. $39
MINITOWER
10 BAY W/SLIDING DOOR 200 WATT P.S $59
MIDTOWER
8 BAY/230W P.S. $65
MIDTOWER
10 BAY W/SLIDING DOOR 230 WATT P.S. $79
FULL TOWER
11 BAY/250W P.S/DIGITAL $79
KEYBOARDS
ENHANCED 101 KEY Mechanical $14
FOCUS 2001 ..... $32
FOCUS 9000 ..... $50
FOCUS 6000 ..... $32

FLOPPY DRIVES

TEAC 1.44MB WHITE & BEIGE $36
TEAC 1.2 MB $47

CD TITLES

CD 14 ACTION PACK II-14 TITLES $39
GROLLIERS ENCYCLOPEDIA $19
RETURN TO ZORK $25
SIMCITY 2000 ..... $25
IRON HELIX $19
MONOPOLY $49

CPU

Intel CPU's
Pentium 90 ..... $599
Pentium 66 ..... $399
Pentium 60 ..... $399
486DX4-100 ..... $459
486DX2-66 ..... $185
486DX2-50 ..... $235
486DX33 ..... $129
486SX33 ..... $ 94
AMD CPU's
486DX4-100 ..... $299
486DX2-80 ..... $179
486DX2-66 ..... $149
486DX40 ..... $139
CYRIX CPU's
486DX33 ..... $ 99
486DX40 ..... $120
486DX2-50 ..... $145
486SX-40 ..... $ 85
486DLC-40 ..... $ 70
486DX2-66 ..... $139

MOTHER BOARD

PENTIUM 100/90
4 PCI/4 ISA/2 VL/256-512K $219
PENTIUM 66/60
4 PCI/4 ISA/3 VL/512K. $199
PENTIUM 66/60
2 VESA/5 ISA/256K-512K $159
486DX / PENTIUM 66/60
2 VESA/5 ISA /256-512K/128MB EXP. 2 PROCESS SOCKETS $215
486DX4-100 GREEN 72PIN ..... $ 99
486DX PERCOMP VLB/PCI $145
486DX 2 VESA/3 EISA ZIFF AMI $160
IBM SLC2-66 W/CPU & MATH CO $139
486DX PCI / 5 ISA / VESA/256K-512K AMI/ZIFF/128MB EXP. $139
486 3 VL BUS 256K CACHE AMI/SARC/ P24 64MB EXP. ..... $ 85
3486 2VL BUS 128K CACHE AMI/OPTI/ 64MB EXP. $105
486DLC40 W/CPU & MATH-CO $109
486SLC-40 W/CPU ..... $ 82
486SLC-33 W/CPU ..... $ 69
386DX-40MHz 128K CACHE AMI/PC CHIP 32MB EXP. w/CPU ..... $ 89
386SX-40 AMI BIOS PC CHIP EXP. 16MB SIMMS ..... $ 54

GRAPHICS CARDS

VGA CARD
1024 X 768 W/1MB C.L. 5420 ..... $ 51
VGA CARD
1024 X 768 W/1MB C.L.5422 WINDOWS ACCEL $ 60
VGA CARD
1024 X 768 W/512K TRIDENT 9000D ..... $ 36
VGA CARD
1024 X 768 W/1MB TRIDENT 8900D ..... $ 55
VGA VLB
1280 X 1024 W/1-2MB EXP TO 2MB/TRIDENT 9400CRX ..... $ 69
VGA VLB
1280 X 1024 W/1MB CIRRUS LOGIC 5428 .... $ 75
VGA VLB
1280 X 1024 W/1MB CIRRUS LOGIC 526 W/VLB IDE/IO $110
VGA PCI BUS
1280 X 1024 W/1MB AL2301 ..... $ 89
DIAMOND STEALTH 24VLB
1280 X 1024 W/1MB EXP 2MB VESA $130
DIAMOND STEALTH 64VLB 2MB $289
DIAMOND STEALTH 64VLB 2MB DRAM $189
DIAMOND STEALTH 64PCI 2MB VRAM . $299
DIAMOND STEALTH 32VLB 2MB $159
DIAMOND VIPER PCI BUS W/2MB $389
DIAMOND VIPER VLB 1MB EXP. TO 2MB .. $149
DIAMOND VIPER VLB W/2MB $349

MULTI-MEDIA

SONY CD
DOUBLE SPEED W/INTERFACE $119
MITSUMI CD-ROM X4 SPEED $210
TEAC X4 CD-ROM
W/SOUND SPIRIT JAZZ 16 BIT SOUND CARD. $289
SOUND SPIRIT JAZZ 16 BIT SOUND CARD SOUNDBLASTER COMPATIBLE ..... $ 59
CREATIVE LABS SB16 MCD ..... $ 85
CREATIVE LABS SB 32 AWE $270
PERCOMP MULTIMEDIA KIT $279
ISP-16BIT SOUND BLASTER COMP. SOUND CARD
X2 CD-ROM DRIVE
14-MICROSOFT WINDOWS TITLES
MPC LEVEL 2 COMPLIANT/SPEAKERS 8W

MONITORS

PERCOMP 14" SVGA GREEN MONITOR
.28 DP, NON-INTERLACED 1024 X 768 $209
DAYTEK 14" SVGA MONITOR
.39 DP, 1024 X 768 ..... $205
INFINITY 14" SVGA MONITOR
.28 DP, NON-INTERLACED $325
MAG MX14S 14" SVGA MONITOR
.25 DP, ZERO BORDER OVERSCAN 1280 X 1024, LED MODE INDICATOR $475
14" SVGA MONITOR NAI
.28 DP, NON-INTERLACED GREEN ... $199
MAG MX15F 15" SVGA MONITOR
1280 X 1024 NON-INTERLACED FLAT SCREEN $449
DAYTEK 17" SVGA NON-INTERLACED MONITOR .28 DOT PITCH $575
MAG DX17F 17" SVGA COLOR MONITOR
.26 DOT PATCH, 1280 X 1024 NI FLAT SCREEN $659
MAG MSP17F 17" COLOR MONITOR .26DP 1600 X 1280 NON-INTERLACED $929
DAYTEK 20" SVGA MONITOR
.28 DOT PITCH $1105

MULTIMEDIA SPEAKERS

100 WATT SPEAKERS (PAIR) ..... $ 45
2 WATT SPEAKERS (PAIR) $12

CARDS

PCI CACHE/BUS LOGIC/EXP. TO 16MB $209
PCI IDE ..... $ 29
PCI SCSI-2
NCR 8110 7 SCSI DEVICES ..... $ 89
VLB IDE ..... $ 16
VL BUS IDE
I/O CONTROLLER ..... $ 24
IDE CONTROLLER
W/AT-I/O 2S, 1P, 1 GAME PORT ..... $ 13

MODEMS: GVC PRODUCT

14400 BPS INTERNAL FAX/MODEM ..... $ 49
14400 BPS INTERNAL VOICE/FAX MODEM ..... $ 65
96/96/24 BPS INTERNAL FAX/MODEM ..... $ 29
28.8 BPS INTERNAL FAX/MODEM $110
NE-2000 COMBO ETHERNET
CO-AX/10B-T Novell Approved ..... $ 29

MEMORY

1MB X 3 - 70 ns 30 PIN ..... CALL
4MB X 9 - 70 ns 30 PIN ..... CALL
4MB X 9 - 70 ns 72 PIN ..... CALL
8MB X 9 - 70 ns 72 PIN ..... CALL

PROMISE TECHNOLOGY

EIDE 2300 PLUS VL-2 IDE 4H/2F IDE/EIDE I/O $ 65
4030VL-2 IDE 4H/2F IDE 0-16MB $110
420VL IDE I/O 512K-1MB 2H/2F IDE $105
200 IDE ISA 4H/2F IDE 0-16MB $105
440VL-2 SCSI/IDE 4H/2F IDE 0-16MB $199

No Surcharge for Credit Card
$10 Shipping & Handling Charge for orders under $200
2% Cash Discount on all orders
*All Brand Names are Registered trademarks of their respective Companies
*Price & Specifications are subject to change without notice.

Store Hours: M-F 9AM-6PM, SAT. & SUN. 10AM-3PM

U.S. COMPUTER DISTRIBUTION 16291 GOTHARD ST. HUNTINGTON BEACH, CA 92647

PENTIUM POWER TO GO.

intel inside
pentium

Built-in SoundCard, Microphone & Speaker
This notebook brings the exciting world of multimedia sound anywhere and everywhere you happen to be - with built-in SoundBlaster™ compatible Sound-Card, speaker(s), microphone, & Line-in / Line out jacks.

Local Bus Graphics Accelerator & Vivid Color
The local-bus WinNote is just as powerful as your desktop - just a lot lighter. Now work in powerful applications with LB speed & color.

340MB IDE Drive – Minimum (520MB / 720MB Available)
With today's applications and multimedia graphics requiring so much storage space, we equip you with a huge 340MB HDD - Standard.

Two PCMCIA Slots (Type II & III)
Open up the doors of flexibility with PCMCIA - allowing instant Fax, Modem, Networking, Credit Card Size hard drives and more.

Plenty of Ports for Connectivity
Flexible VersaPort allows you to connect standard, bidirectional, or (EPP) parallel device. Plus serial Port, external VGA, and external OS/2 keyboard ports.

APM (Advanced Power Management)
The notebook's power management system supports five power conservation modes: CPU Doze, LCD Dim, Hard Disk Sleep, System Sleep, and System Suspend.

Build a Desktop PC with ReadyDock (optional)
In one easy move, your Win-Note connects to your printer, external OS/2 keyboard, mouse, external amplified speakers, and 1024x768 monitor.

ISO-9002 Certified Quality
Comtrade notebooks are manufactured in an ISO-9002 certified manufacturing facility to ensure the products meet the strictest world-class quality requirements.

COMPACT BUT POWERFUL.

Comtrade Sound Win-Note (Vivid Color)

486DX2-50	4MB RAM	340MB HDD	D-STN (9.5")	$1795
486DX4-75	4MB RAM	340MB HDD	D-STN (9.5")	$1895
486DX4-75	8MB RAM	340MB HDD	D-STN (9.5")	$2095
486DX4-100	4MB RAM	340MB HDD	D-STN (9.5")	$1995
486DX4-100	8MB RAM	340MB HDD	D-STN (9.5")	$2195
486DX4-100	12MB RAM	520MB HDD	Active TFT	$3395

Pentium-75
8MB RAM / 340MB HDD
$2595

Pentium-90
8MB RAM / 340MB HDD
$2895

Pentium-90
8MB RAM / 540MB HDD
$3095

Standard Features

- 4MB / 8MB RAM (exp to 20 / 40MB)
- User Replaceable 340MB Hard Drive
- 9.5" Dual Scan STN Color Display (10.3" for Pentium)
- 3.5" 1.44MB Floppy Drive
- Local Bus Windows Accelerator
- Enhanced Audio Sound System: Built-in Microphone & Speaker External Jacks for Line In & Line Out
- Removable NI-MH Battery
- Docking, Serial, & (EPP) Parallel Port
- Two Type II / One Type III PCMCIA Slot
- Ergonomic Keyboard with Hand Rest
- TrackPoint for Pentium; TrackBall for 486
- Carrying Case & AC Adapter
- One Year Parts & Labor Warranty

VIVID ACTIVE MATRIX $890

QUICK GUARANTEED SHIP

Best Buy Options

NI-MH Battery (1-hr quick charge)	$120
ReadyDock Replicator	$120
340MB to 520MB / 720MB Drive	**$200 / $400**
4MB RAM Card	$220
8MB RAM Card	$460
14,400 PCMCIA FaxModem	$160
9.5" Active Matrix Display	**$890**

IT'S A SMALL PRICE TO PAY FOR

4X CD-ROM POWER.

intel inside

PCI Lightning 4x

- Ultra-Fast 256K Cache; Up to 512K
- 8MB RAM & Expandable to 128MB
- 730MB IDE Hard Drive
- Quad Speed 4X CD-ROM (600KB/Sec) Drive
- One Floppy Drive (3.5" or 5.25")
- PCI Enhanced IDE HD Controller
- PCI Diamond Stealth 64 (2MB) Accelerator (Best accelerator for both DOS & Windows)
- 15" Flat Screen NI Monitor .28mm
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse

486DX2-66	$1645
486DX4-75	$1695
486DX4-100	$1795
PENTIUM-75	$1895
PENTIUM-90	$2195
PENTIUM-100	$2395

- Instant MultiMedia (16-Bit Stereo Sound Card & Speakers) Add $95
- 14,400 / 28,800 Baud FaxModem with WinFax Add $90 / $170
- 420MB / 850MB Tape Backup Add $200 / $320

MultiMedia Tornado 4x

- **Media Magic 16-Bit Stereo Sound Card**
- **2 Amplified Stereo Speakers**
- **Microsoft Works, MS Money, & MS EnCarta (CD)**
- Quad Speed 4X CD-ROM Drive
- **16MB** RAM & **256K** Cache
- **730MB** 10ms **PCI Enhanced IDE** Hard Drive
- One Floppy Drive (3.5" or 5.25")
- **PCI** Local Bus **Enhanced IDE** HDD Controller
- **64-bit** PCI **Diamond Stealth 64 (1MB)** Accelerator (The best accelerator for both DOS & Windows)
- **15" Non-Interlaced .28mm Flat Screen Monitor**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse

486DX4-75	$1995 PCI
PENTIUM-75	$2245
PENTIUM-90	$2545
PENTIUM-100	$2745

- 14,400 Baud FaxModem w. **Voice Mail** Add $90
- 17" Flat Screen .28mm 1280x1024 Monitor Add $320
- Larger **850MB / 1275MB** IDE Drive Add $60 / $250

PCI Best Buy

- Intel486™ or Pentium™ Processor
- Ultra-Fast **256K** Cache; Up to 512K
- **8MB** RAM & Expandable to 128MB
- **540MB** 12ms **PCI Enhanced IDE** Hard Drive
- One Floppy Drive (3.5" or 5.25")
- **PCI** Local Bus **Enhanced IDE** HDD Controller
- PCI **Diamond Stealth SE (1MB)** Accelerator (Diamond - A Top Choice for Performance)
- **15" Non-Interlaced .28mm Flat Screen Monitor (36% larger edge to edge display)**
- 2 Serial, 1 Parallel & 1 Game Ports
- Enhanced 101-key Keyboard
- Hi-Resolution 400 DPI Serial Mouse
- EPA Energy Star Compliant

486DX2-66	$1375 PCI
486DX4-75	$1425 PCI
PENTIUM-75	$1625
PENTIUM-90	$1895

- 16-Bit Stereo Sound Card & 2 Speakers Add $95
- 17" Flat Screen .28mm 1280x1024 Monitor Add $320
- **2X CD-ROM / 4X CD-ROM** Drive Add $135 / **$200**

818.961.6688

COMTRADE

"The Lightning PC"

DSA# G800684AQ35087

CD Titles IN STOCK

101 Best Games (Doom) $12
9 Digit ZipCode 13
7th Guest 15
Aegis 23
Aesops Fables & Cinderella 12
Aladdin & the Wonderful Lamp 12
A Line in the Sand 15
All You Can Play 8
America Alive 13
American Business Phone Book 93/4 13
American Heritage Dictionary 15
Animation Tour 12
Animals 12
Arthur's Birthday 33
Arthur's Teacher Trouble 13
Asia Alive 13
Atlas Pack (US & World) 13
Audubon's Birds 12
Audubon's Mammals 12
Barrons College Guide 10
Battle Chess Enhanced 16
Beneath a Steel Sky 22
Berlitz Think & Talk, (7 CDs) 95
Best of Micropros (Rail Road Tycoon, Pirates, Rex Nebular Command HQ) 14
Bloodnet 22
Blue Force 18
Business 500 16
Butterflies 12
Butterflies of the World 15
Central Intelligence C.H.A.O.S. Continuum 12
Colossal CookBook 11
Comanche 25
Communication Master 8
Comptons Interactive 95 25
Compton's InterActive Encyclopedia 19
Compton's Family Choice 14
CookBook Heaven 14
Corel Draw 5 Upgrade 169
Critical Path 17
Cutpost 23
CyberRace 14
Dark Legions 17
Day of the Tentacle 17
Deathstar Arcade Battles 10
Deluxe Pack 4 (U.S./World Atlas, Typing Tutor, Chess 4000) 15
Dictionary of theLivingWorld 14
Dinosaur Encyclopedia 14
Doom Companion Edition 13
Dracula Unleashed 19
Dr. Games 9
Dr. Music 11
Dr. Shareware 9
Dr. T's Sing Along 12
Dr. Windows 9
Dragon's Lair 35
Dune 15
Enro Pages 16
Europe Alive 13
Family Doctor 3rd Ed 14
Family Education Collection 14
Family Fun 8
Farm Animals 12
Food Analyst 12
Forever Growing Garden 18
Fractal Frenzy 15
Gabriel Knight 17
Game Collection 9
Game Galore 8
Games Graphics Utilities 8
Game Library 10
Geekwad 18
Goblins 1 15
Goblins 2 15
Graphic Works 20
Great Cities of the World Vol 1 & 2 13
Great Mysteries 15
Grolier's Encyclopedia 6.0 15
Grooves 15
Gus Goes to CyberTown 12
Health and Medical Industry Directory 10
Heather Hits her First Home Run/ Moving gives me a Stomach Ache 12
Helcab 25
Hobbe OS/2 15
How the World Works 18
I Can Spell 12
Image Warehouse 15
Inca 14
Indiana Jones 15
Internet Tools 16
Iron Helix ..... CALL
Jazz 15
Jutland 19
Jones In The Fast Lane 12
Journeyman Turbo 18
Just Grandma And Me 15
Kids Farm 12
Kings Quest V 10
Kings Quest VI 15
Kodak Photo CD 12
Larry & the Haunted House 33
Languages of the World 14
Last Dinosaur Egg 15
LawnMower Man 15
Legal Guide 14
Linux (Developers Resource) $16
Little Monster at School 33
Loom 11
Lord of the Rings 19
Lunicus 20
MacMillian Dictionary 15
Mad Dog McCree II 18
Magic Death 13
Man Enough 20
Mantis 10
Mario's Missing (DELUXE) 12
Mathematic's Library 13
Mayo Clinic 14
Mega Race 15
Microcosm 15
Microsoft Cinemania 94 29
MicroSoft ENCARTA 94 30
Monarch Notes 15
Monkey Island 12
Morphology 101 18
Mozart 10
MPC Wizard 3.0 15
MS Bookshelf 93 19
MS Bookshelf 94 34
MS Dangerous Creatures 26
MS Dinosaur 28
MS Encarta 95 39
MS Money 19
MS Musical Instruments 25
MS Works 30
Multimedia Family Bible 18
Music Shop Pro 15
Myst 45
Nat. Geographic Mammals 15
National Parks 14
New Kid on the Block 34
Night Owl 13 20
Ocean Below 12
Operation Desert Storm 10
Ozzies World 15
Parenting 14
PC Sigs World of Business 15
PC Sigs World of Education 15
PC Sigs World of Multimedia 15
Platinum Collection 9
Plug & Play Linux 22
Puzzle Puzzle 12
Quantum Gate 17
Quick & Easy Spanish 18
Rainbow Children Park 12
Rebel Assault 25
Return of the Phantom 18
Return to Zork 17
Reunion 20
Ringworld 18
Ruff's Bone 33
Scary Peoms for Rotten Kids/A Long Hard Day on the Ranch 14
Secret Weapons of the Luftwaffe 12
Select Phone 69
SFX 13
Shuttle 20
SimCity 2000 23
Source Code (Walnut Creek) 16
Space & Astronomy (Walnut Creek) 17
Space Shuttle 13
Spiders 12
Star Trek 25th Anniversary 20
Starwars Chess 15
Street Atlas USA 75
Sub War 2050 22
Supersonic 18
Syndicateplis 29
Tempra Access 9
TFX 25
The Best Caching Software 8
The Bible Library 19
The First Emperor of China 15
The Hord 25
The Journey man project 19
The Paperbag Princess & Mudpuddle 12
The Tale of Benjamin Bunny 12
Time Almanac 12
Timetable of History Arts & Entertainment 15
Timetable of History Business Politics & Media 15
Time Almanac Reference Edition 17
Tool Kit for Linux 22
Tornado 23
Tortoise and the Hare 34
Tuneland 22
Twains World 15
UFO 2
US Air Power 10
US Aircraft Carriers 10
US Battle Tanks 10
U.S.A. Today 12
U.S. History 15
Wacky Funsters 18
Walnut Creek Titles 14
Whales 12
What Air Can Do 12
Where in the world is Carmen San Diego 15
Who Killed Breet Denunce? 15
Who Killed Taylor French? 15
Who Shot Johnny Rock 20
Willy Beamish 10
Wolf 3-D Mania 12
World Atlas Ver.4 11
World Circuit 15

Professional Multimedia Pack™.... $309
Toshiba Triple Spin, Multisession
SoundBlaster 16 SCSI-2
Seek Time: 195MS Transfer Rate: 450KB/S

EINSTEIN Multimedia Pack™..... $389
Toshiba 4 Plex Quad Speed, Multisession
SoundBlaster 16 SCSI-2
Seek Time: 120MS Transfer Rate: 600KB/S

INTELLECT Multimedia Pack™ $299
Mitsumi Quad Speed, Multisession
SoundBlaster 16 MCD
Seek Time: 195MS Transfer Rate: 600KB/S

CLASSIC Multimedia Pack™ $209
Sony or Mitsumi FX001-D Double Spin, Multisession
SoundBlaster 16 MCD
Seek Time: 250MS Transfer Rate: 350KB/S

All of the above packages include one pair of Amplified Speakers & 19 CD Titles: Grollier's Encyclopedia, RoboCop 3D, ChessMaster 2100, World Atlas V.4, Epic, Mario is Missing, Push-Over, Life & Death 2, Mario's Time Machine Deluxe, D/Generation, Contraption Zack, Might & Magic II, Dictionary of Quotable Definitions, Webster's New World Dictionary, Guide to Concise Writing, Desk Reference Dictionary of 20th Century History, Webster's New World Thesaurus, The National Directory, Legal & Corporation Forms.

EINSTEIN "The"

CD ROM

Toshiba 3501 Quad Speed 120MS 600KB $265
Toshiba 3XI SCSI 189
NEC CDR 510 3XI 195MS 450KB Per Sec SCSI 205
NEC CDR 210 320MS 300KB Per Sec SCSI 125
Sony CDU55E 250MS 350KB/S NEW IDE 110
Panasonic 562 Double Spin 320MS, 300KB/S 109
Plextor 4 Plex Quad Speed w/1MB Buffer 389
Mitsumi Quad Speed 189
TEAC Quad Speed 189

CALL FOR EXTERNAL CD ROM DRIVES

Sound Cards

SoundBlaster 16 Basic $85
SoundBlaster 16 MCD 75
SoundBlaster 16 MCD ASP 135
SoundBlaster 16 SCSI-2 99
SoundBlaster 16 SCSI-2 ASP 159
SoundBlaster AWE 32 ASP 249

Modems

Rockwell 14,400 INT FAX MODEM $54
U.S. Robotics 14.4 Internal Fax Modem/Ext 97/115
MAXTech 14.4 Int Voice Fax Modem 65
MAX Tech28.8 Int FAX MODEM/EX 115/130

Controller Cards

IDE ISA Controller 2FD, 2H, 2S, 1P, 1G Port $13
Enhanced IDE, VLB Controller 2FD, 2HD, 2S, 1P, 1G Port 20
PCI Enhanced IDE Controller 25
VLB IDE w/16550 UART 4HD, 2FL, 2S, 1P, 1G 45
ISA IDE w/16550 UART 39
NCR 810 PCI SCSI 69
Adaptec PCI 2940 195
Adaptec PCI 2940W 235
Adaptec VLB 1542 179
Adaptec VLB SCSI 100

Cases

Mini $35
Medium Tower 55
Full Tower 69
DeskTop 55

Keyboard

101 SoftTouch Keyboard $15
Focus 2001 Keyboard 32
Focus 8000 Keyboard 39
Focus 9000 Keyboard 49

Mouse

Hi-Res. Mouse Qtronics $10
Ms Mouse 29

FOR ADULTS ONLY

Adult Palate 25
All American Hooter Heaven 25
Amateur Models 25
American Girls 20
American Girls 2 20
Amorous Asian Girls 25
Asian Palate 26
AP. . . Called Wanda 20
Art of Picking up Girls 10
Biker Babes 18
Cafe Flesh 20
College Girls 25
Curse of the Cat Woman 20
Dirty Debutantes (InterActive) 30
Dream Machine 38
Exotic Poses 20
Fao 2 20
Girls Doin Girls 25
Girls Games 25
Girls Girls Girls 20
Girls of Pleasure 25
Girls of Stephen Hicks 20
Hidden Obsession 20
High Volume Nude 20
Hot Pics 20
House of Dreams 20
Interactive Adult Movie Almanac 39
Insatiable 20
Interactive Adventures of Seymore Butts 38
Interactive Adventures of Seymore Butts II 45
Kelly Eighteen 25
Maddam's Family 30
Mask 20
Nasty Nurses 20
New Wave Hookers 20
Night Trips 20
Night Watch Interactive II 35
Nova Collection, vol. 1 or 2 25
Orient XXX-Press 20
Pinch of Pepper 30
Scissors and Stones 29
Secrets 20
Sex 25
Sinful Girls 20
Sixty Nine 25
Squirt City 20
Strippoker 25
T&A 2 The Maxx 20
The Fisherman's Wife 25
Top Heavy 20
Topless Dancer 15
Urotsukidoji 25
Wet Dreams 20
Wicked Whispers 15
Winner Takes All 35
Women on Wheels 20
World's Best Breasts 20

PENTIUM PCI LOCAL BUS STANDARD SYSTEMS™

PENTIUM 90 MHz $1,749
PENTIUM 66 MHz $1,539
PENTIUM 60 MHz $1,529

- Intel 64 Bit CPU w/Heatsink & Fan
- PENTIUM PCI Local Bus M.B. w/Zif
- 8MB RAM (exp to 128)
- 1.44 MB Floppy
- 420 MB Hard Drive
- PCI Enhanced IDE Controller w/2S/1P/1G Port
- PCI SVGA w/1MB Video Accelerator Card
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat Screen, Edge to Edge
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

5 YR. LABOR WARRANTY
1 YR. PARTS

PENTIUM PCI LOCAL BUS PROFESSIONAL SYSTEMS™

PENTIUM 90 MHz $2,429
PENTIUM 66 MHz $2,189
PENTIUM 60 MHz $2,149

- Intel 64 Bit CPU w/Heatsink & Fan
- Intel Motherboard "Neptune" for 90 MHz
- 256k Cache Memory
- 16MB RAM (exp to 128)
- 1.44 MB Floppy
- 1GB Hard Drive
- PCI Enhanced IDE Controller w/2S/1P/1G Port
- PCI ATIMach 64 w/2MB RAM SVGA Card or Diamond Stealth 64 w/2MG
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

5 YR. LABOR WARRANTY
1 YR. PARTS

PENTIUM PCI SCSI STANDARD SYSTEMS™

PENTIUM 90 MHz $1,849
PENTIUM 66 MHz $1,669
PENTIUM 60 MHz $1,619

- Intel 64 Bit CPU w/Heatsink & Fan
- PENTIUM PCI Local Bus M.B. w/Zif
- 256k Cache Memory
- 8MB RAM (exp to 128)
- 1.44 MB Floppy
- 540 SCSI Hard Drive
- PCI Enhanced SCSI Controller w/2S/1P/1G Port
- PCI SVGA w/1MB Video Accelerator Card
- 15" SVGA N.I. Monitor, Energy Saving, 1280 x 1024 Digital, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

VESA LOCAL BUS SYSTEMS™

486DX2-66 ..... $929
486DX2-50 ..... $869
486DX-33 ..... $869

- PENTIUM Overdrive ready Motherboard
- 256k Cache
- Fan & Heatsink
- 4MB RAM
- 420 MB Hard Drive
- 1.44 Floppy
- 14" SVGA N.I. Monitor Energy Saving Full Screen
- VL Bus SVGA w/1Mg Video Accelerator Card
- VL Bus Super IDE Controller w/2S/1P/1G port
- 101 Enhanced Keyboard
- High Resolution mouse
- Mini Tower Digital Case w/ 2/235 Watts P.S.

5 YR. LABOR WARRANTY
1 YR. PARTS

PENTIUM SCSI PROFESSIONAL SYSTEMS™

PENTIUM 90 MHz $2,649
PENTIUM 66 MHz $2,399
PENTIUM 60 MHz $2,319

- Intel 64 Bit CPU w/Heatsink & Fan
- INTEL Motherboard "Neptune" for 90 MHz
- 16MB RAM (exp to 128)
- 1.44 MB Floppy
- 1GB SCSI Hard Drive
- PCI ADAPTEC 2940 SCSI Enhanced Controller
- PCI ATIMach 64 w/2MG SVGA Card or Diamond Stalth 64 w/2MG
- 15" N.I. Monitor, Energy Saving, 1280 x 1024 Digital Control, Flat & Full Screen,
- Mid Tower Digital w/235 Watts P.S.
- High Resolution Mouse
- 101 Enhanced Keyboard

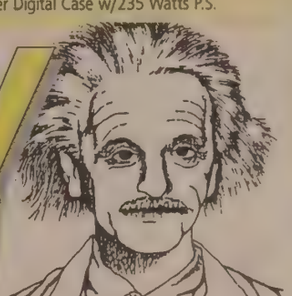
5 YR. LABOR WARRANTY
1 YR. PARTS

SUPERQUICK 486™

486DX4-100 ..... $1,209
486DX2-80 ..... $1,079

- Pentium Overdrive Ready Motherboard
- 256K Cache
- Fan & Heatsink
- 8MB RAM
- 540MB hard drive
- 1.44 Floppy
- 14" SVGA N.I. Monitor Energy Saving Full Screen
- VL Bus SVGA w/1MG Video Accelerator Card
- VL Bus Super IDE Controller w/2S/1P/1G port
- 101 Enhanced Keyboard
- High Resolution Mouse
- Mini Tower Digital Case w/235 Watts P.S.

TECHNOLOGY "Smart Choice"



Corporate, University and Government P.O.'s are welcomed.

Parts

Midi Adapter	$18
115 Watts Amplified Shielded Speaker	49
Conner 250 Mg Tape Back Up	129
Super IDE, VLB Controller 2FD, 2HD, 2S, 1P, 1G Port	20
IDE ISA Controller 2FD, 2HD, 2S, 1P, 1G	15
Video Spigot	149

Video Cards

Trident ISA w/1MG	$50
Trident 9400 Windows Accelerator N.G. A. up to 2MG	65
Trident PCI w/1MG	85
Trident PCI w/2MG	110
Kelvin 64 VLB w/1MG up to 2MG	125
ATI Mach 32 VLB 1MB D	99
ATI Mach 32 VLB 2MB D	155
ATI Mach 64 PCI 2MB D	179
ATI Mach 64 PCI 2MB V	259
ATI Mach 64 PCI 4MB V	459
Diamond ISA Accelerator 1MG VGA	90
64 Diamond Stealth VLB 1MG D	135
64 Diamond Stealth VLB 2MG D	175
64 Diamond Stealth VLB 2MG V	269
Diamond Stealth PCI 32 2MG D	145
Diamond Stealth PCI 64 2MG D	179
Diamond Stealth PCI 64 2MG V	275
Diamond Viper PCi 64 2MG V	245

Monitors

Impression 14" N.I. 1024x768, 0.28mm, L.R. & Energy Saving, Edge-to-edge	$209
MGC 15" N.I. 1280x1024, 0.28mm, L.R. & Energy Saving, Flat & Edge-to-edge	285
MAG 15" N.I. 1280x1024, 0.28mm, L.R & Energy Saving	310
MAG 17" N.I. 1280x1024, L.R. & Energy Saving	569

Motherboards w/CPU

486DX2-66, 256K VESA Pent Ready Intel/AMD	$255/235
486DX2-80 AMD 256K VLB	250
486DX4-100 Intel, 256K VESA Local Bus	539
486DX40, AMD 256K VLB	199
Pentium 60 MHz, 256K Cache, PCI	530
Pentium 66 Mhz, 256K Cache, PCI	550
Pentium 90 Mhz, 256K Cache, PCI	750

Floppy Drives

Teac 1.2MB (5-1/4")	$45
Teac 1.44MB (3-1/2")	35

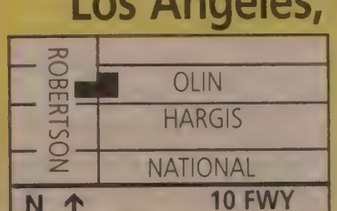
Hard Drives

Maxtor or Conner 420MB	$169
Maxtor 540MB or Conner	195
560MB IDE	189
Conner 850MB	269
Conner 1 GB or Western Digital IDE	389
Conner or Quantum 540MB SCSI	229
Conner or Quantum 1GB SCSI	459
Quantum 730MB IDE	259

Memory

1 Meg x30 Pins 70ns	$31**
4 Meg x30 Pins 70ns	110
4 Meg x 72 Pin	145
8 Meg x 72 Pin	285
16 Meg x 72 Pin 70ns	415

Tel: (310) 836-4441
Fax: (310) 836-6060
2812 1/2 S. Robertson Blvd.,
Los Angeles, CA 90034



NOW HIRING SALES & TECHNICIANS

HOURS:
M-F 10AM-6PM
Sat. 10AM-6PM
Sun. CLOSED

Terms and conditions: All of the above prices reflect 3% CASH or CHECK discount. Customers who pay CASH receive an additional 3% discount. Does not apply to resellers. Defective merchandise is exchangeable for the same item only. Not responsible for any typographical errors.

continued from page 112

got, being an old research guy now moved into the online business, is that if I want to try something out, I've got two million people out there, some portion of which will try it out and tell me real quickly if I have a winner on my hands or if I've got a problem. Instant test-tube. No need to guess, no need to run the focus groups—if you can turn it on, just turn it on and go.

Just post the disclaimers. [*laughs*]

I've got a group in Massachusetts that's deploying some machine translation of natural language on the service. It's licensed technology, nothing exotic—translation from English to German and back, and English to French and back. Like most such technologies you wouldn't want to trust it with a legal document.

What we're trying that's new is using it in a social context, where people are wanting to talk to each other about various things, and if it doesn't quite work, somebody can say, "Huh? Can you say that again?" or somebody else will jump in and say, "I think they meant..." Right now that looks like a limited success, and we're going to try doing it on a larger scale, the basic reason being that people like to talk to each other, type to each other, that's where we make our money.

The more transparent we can make it, the more cultures we can bridge together that would like to talk to each other, the wider the community grows. From the wallet-hugging part of my personality, that works well; from the part of me that's in this because I really want people to have a worldwide community, that looks good too.

We'll see what happens. We're already seeing a few phenomena out there—although we put this up originally on a support forum, on the idea that at least it was something we know that was being talked about, topic drift is inevitable. So people were out there talking politics, talking about the weather, sending messages to themselves—they can get a free translation—and what's been most instructive is those failures, how people are trying to bend it all. So we're watching and learning from that.

You can't anticipate every scenario that's going to happen and everything that's going to go wrong and every way that somebody's going to think of to do something.

Right. With two million potential users out there, there's for certain going to be a lot of people thinking of things you don't. And the best thing you can do in some cases is to put it out there, and watch for how they try and bend it.

We've got a few other things coming down the pipe that we'll try that with as well—put it out there on a limited scale and see what people make out of it all. What's the worst thing that could happen? Take it back down and confess it didn't work—and that's better than having to spend a large amount of money polishing it perfectly and deploying it large-scale and finding out, Oops, no demand, no interest.

From where we are now, what do you think would be the next coolest thing to have to enhance the whole online experience? This is speculative, not an invitation to preannounce products you're not allowed to talk about!

I think one of the most interesting potentials that a number of people are working on goes back to this whole idea of agents, but I mean it in a somewhat different way from, say, General Magic. I worked on the agents problem over at Apple, as have a large number of other people.

One of the things you start seeing on the nets is that a large amount of information focusing and dissemination happens in a person-to-person style. When you get saturated even by the mailing lists, when you start dropping off of them because even ten messages a day is too much traffic, and the digests are too long to read, what you fall back on then is a sort of social credit scheme, where people will send you interesting forwards, and you value them according to who did the final forward to you and how many others there are on there. There's an expectation in return that you're going to forward back neat stuff, right? You're part of a little community there. So you're my agent and I'm yours.

So there may be an interesting kind of person-machine hybrid out there, as it were, that includes the stuff you can automate, the sort of very rough textual analysis and focusing, which we all know is fallible but is better than having to do it all by hand, combined with an ability to basically give credit where credit is due, in terms of somebody that endorses a message.

The Xanadu scheme?

To some extent. A number of Ted Nelson's visions are coming true, just not exactly in the way that he originally intended, and in a very disorganized, decentralized fashion.

So there may be some interesting hybrids. To me, one of the most interesting things to "retrieve" is not necessarily a database or a chunk of a database, it's a person. Somebody that I can talk to in a very interactive way and find out an answer to what I actually wanted to find out, instead of having to do my own analysis. If you're in business, who cares if I have to pay them a thousand bucks, I'd have spent that much on Dialog by the time I was done anyway, and certainly that much of my time.

Editors are going to do great in this new world, because somebody needs to make sense of all this.

Professional filters.

Yes, the professional filters are going to do just fine. The analysts. When I finally find out who's the person that has reasoned this through before, that can lead me down the path in an efficient fashion—if there's a system that exists to make it easy to find that person, they're going to do great too. They'll be able to get their value out there without basically needing to join up with an EDS or something like that. They can get their value out in a way in which the transaction costs have been dropped rather radically.

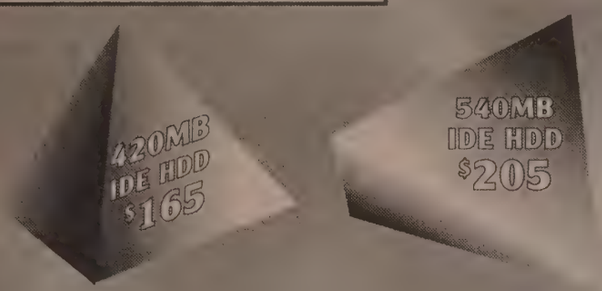
I think one of the generic mistakes that's been made with things like home banking is that the urge to transact is not that far up there in terms of end-users' and consumers' priority of needs.

People like yourself, editors, people with a byline, writers, should at this point believe they're in the catbird seat. You're in an excellent position. Because attitude, point of view, knowledge, and analysis are going to be upvalued by all of this. And there are going to be fewer toll-takers standing between people like you and your end-users. It's great news for people on the creative side.

There's an idea that textual literacy is a dying thing, that video is taking over, the new generation ain't what we used to be. That may be true in terms of entertainment forms to some extent. People may have a little more appetite for a video now than a good long read.

But I think we're seeing potentially the rebirth of letter-writing. We're doing it in screens-full rather than pages-full. It's no longer what will fit in a 32-cent envelope, it's what will somebody read in terms of paging down. The art of cogent argument and keeping alive an argument in a small space is

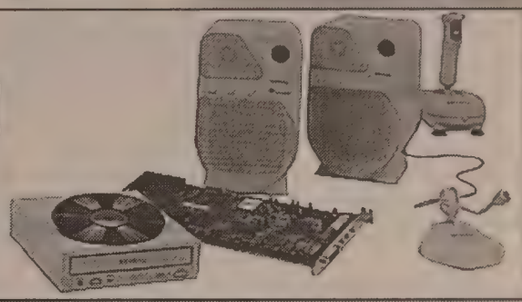
MD MICRO DATANET



UPGRADE SPECIAL!
286, 386 to
486DX2-66MHz Intel
Only $259

SPECIAL MEMORY UPGRADE!

1MB	SIMMS	30 PIN	'35.90
4MB	SIMMS	30 PIN	'120
4MB	SIMMS	72 PIN	'145
8MB	SIMMS	72 PIN	'279
16MB	SIMMS	72 PIN	'429



CUSTOM CONFIGURED SYSTEMS • NOBODY BEATS MICRO DATANET's SYSTEM PRICES & QUALITY

SMART SPECIAL SYSTEM
486DX2/66MHZ VLB SYSTEM

- 4MB RAM BRAND NAME
- 420MB IDE Hard Drive
- 1MB VESA Local Bus
- LV Bus 32bit Controller
- TEAC 1.2 & 1.44 Floppy Drives
- Soft Touch 101 Keyboard
- Deluxe Mini Tower Case w/LED-300W
- Microsoft Compatible Mouse
- Monitor not included

intel inside

ONLY $839

MD SYSTEM SPECIAL!
PENTIUM

- 3 PCI Slots, 256K Upgrade to 512K
- 15" Flat Screen, N/I, .28dpi
- 8MB RAM BRAND NAME
- 540MB IDE hard drive
- 9420 PCI 1MB Upgrade to 2MB
- PCI IDE I/O Controller
- TEAC 1.2 & 1.44 Floppy Drives
- Deluxe Mid Tower Case w/LED-230W
- Focus 2001 Keyboard
- Microsoft Compatible Mouse

ONLY: P5/90MHz $2179
P5/60MHz.....$1739

MULTIMEDIA UPGRADE KIT

*SONY CDU-55E IDE 2X
CD ROM Drive w/Acer 30 Creative Chipset
16 Bit Sound Card **$179**

*MITSUMI 4X IDE CD ROM DRIVE
w/Acer 30 Creative & CD title Deluxe
4 (US/World Atlas, Chessmaster,
Tech Typing) **$279**

*120 Watts Speaker
SPECIAL
ONLY $69/pair

MONITORS

14" N/I, L/R,
.28DPI Shamrock.....$215
15" Flat Screen, N/I,
L/R Digital .28DPI, Shamrock 295
17" Flat Screen, N/I, L/R
.26DPI Edison 549
14" SVGA .28DPI RIC MONITOR 177

MAG
DX-15F 15" .28DPI N/I, 1280x1024 MPR-II GREEN 335
DX-17F 17" .26DPI N/I, 1280x1024 MPR-II GREEN 635
MX-21F 21" .28DPI N/I, 1600x1280 MPR-II GREEN ..1615

VIEWSONIC
V15EX 15" .28DPI N/I, 1024x768 DIGITAL MPR-II GREEN....365
V17E 17" .28DPI N/I, 1280x1024 MAC MPR-II GREEN....699
NEC, SONY .....PLEASE CALL

HARD DRIVES & TAPE DRIVES

250MB IDE $149
420MB IDE 175
540MB IDE 209
730MB IDE 309
1.0GB IDE, Western Digital.....409
1.2 GB SCSI 2112S Micropolis.....539
1GB Micropolis 2210AV IDE (5YR. WARRANTY) 435

CPU

Pentium P5/90MHz.....$595
Pentium P5/60MHz 395
DX2-66MHz Intel.....169
DX2-80MHz AMD 189
DX4-100MHz AMD 299
DX4-100MHz INTEL 389
AMD Please CALL for Best Price

VIDEO/CONTROLLER CARDS

S3 Vision 864 - PCI SVGA 1MB Upgrade to 2MB.....$109
Diamond Speedstar Pro PCI 1MB.....149
Diamond Stealth 64bit PCI w/2MB VRAM.....289
SVGA Vesa S3-805 w/1MB, Upgrade to 2MB.....76
Trident 9400 32bit, 1MB, Upgrade to 2MB.....69
Trident 9440 32bit, 1MB, Upgrade to 2MB.....82
SVGA Oak 087 1MB w/Window Accelerator.....56
Trident 8900D 1MB Card ISA.....55
Super I/O IDE (2S, 1P, 1G) Goldstar.....14
32bit Prime2 Bus I/O.....19
Adaptec 1542CF SCSI II.....189

CASES w/DIGITAL DISPLAY

DELUXE MINI TOWER w/230W P.S. $38
DELUXE MID TOWER w/230W P.S. 59
DELUXE FULL TOWER w/250W P.S.....69

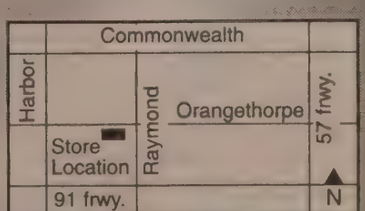
MOTHERBOARDS

PCI - MB Intel P5/90MHz, 3 PCI, 256K, Zif $309
PCI - MB Intel 60/66MHz, 3 PCI, 256K, Zif 285
486DX-33/50/66/4-100MHz, VLB, 256K, Zif.....92
486DLC-40MHz w/Math Co., 128K, CPU 110
IBM 486SLC2/66MHz VLB w/MATH CO.....140
PCI - MB P5-60/66MHz M/B (opti chipset)
PCI/VLB/ISA Slots 199
PCI - MB 90MHz M/B (sis chipset) PCI/VLB/ISA slots.....249

FOR BEST BUY:

JUST CALL OUR SALES DEPARTMENT!

Prices subject to change w/out notice. Not responsible for typographical errors. All prices reflect 3% cash discount. All systems come w/a one year parts and labor warranty. All product names are trademarks of their respective owners and companies.



TEL: 714/447-8710
FAX: 714/447-8711

Hours: Mon. to Fri. 9am-6pm Sat. 10am-3pm

920 E. Orangethorpe Ave., Suite F, Anaheim, CA 92801

ATS, INC.
ADVANCED TECHNOLOGIES AND SERVICES INC.

SALES • UPGRADE
REPAIR • DATA RECOVERY

386DX/40ISA w/128K, w/CPU $ 90.00	486SLC/33ISA w/CPU $ 80.00
486DX/33VLB w/256K, w/CPU $ 205.00	486DX/50VLB w/256K, w/CPU $ 245.00
486DLC/40ISA w/128K / CPU $ 160.00	486DX2/80VLB w/256K, /AMD CPU $ 285.00
486DX2/66VLB w/256K, /INTEL CPU $ 255.00	486DX4/100VLB w/256K , /INTEL CPU $ 480.00

SPECIAL

Mini Tower w/230PS	$ 34	0.39 SVGA 14"	$ 195
Mid Tower w/230PS	$ 50	0.28 SVGA 14" NI	$ 215
Desk Top w/230PS	$ 42	0.28 SVGA 15" NI	$ 290
Full Tower w/230PS	$ 65	1.44 Floppy	$ 32
101 Key Board	$ 14	1.22 Floppy	$ 42
2 Button Mouse	$ 10	IDE I/O 2/FD/HD	$ 12
512K VGA Card	$ 36	VLB IDE 2/FD/HD	$ 20
1 MB VLB VGA Card	$ 70	28800 BPS S/R Modem	$ 105

CD ROM SPECIAL

COMPLETE MULTIMEDIA KIT $ 195.00	QUAD SPEED TEAC AT w/MULTIMEDIA KIT $ 355.00

MEMORY

MEMORY 72 PIN	MEMORY 30 PIN
512K X 36 (2M) $ 95	1 X 3 -70ns Simm $ 36
1M X 36 (4M) $ 165	1 X 9 -70ns Simm $ 38
2M X 36 (8M) $ 295	4 X 3 -70ns Simm $ 123
	4 X 9 -70ns Simm $ 130

HARD DRIVE SPECIAL

170 MB.....$ 140	420 MB.....$ 175	540 MB sca...$ 255
210 MB.....$ 145	540 MB.....$ 210	290 MB sca...$ 190
250 MB.....$ 160	830 MB.....$ 299	2.5" NOTE BOOK
340 MB.....$ 165	1.06 MB... $ 425	250 MB.....$ 235

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SPECIAL REPAIR PRICES

ST225 ST238	$ 32	ST 157A CP3000	$ 40
ST251 ST351A	$ 45	MS3650 CP 3044	$ 45
ST296N ST4096	$ 70	XT7080A WD 280A	$ 70
ST3120A CP3104A	$ 75	ST 1144A ST 3144A	$ 75
CP30104 XT7120A	$ 75	WD2120A Q120AT	$ 75
CP3204F CP30174E	$ 90	LXT7213A WD2200A	$ 90
LXT345A WD340A	$ 100	ST1239A Q240A	$ 100

90 - DAY's WARRANTY ON REPAIR
4 - DAY TURN-AROUND TIME

HARD DRIVE REPAIR

40 - 69 MB.....	$ 60	150 - 199 MB...	$ 100
70 - 119 MB....	$ 75	200 - 249 MB...	$ 110
120 - 149 MB..	$ 80	250 - ABOVE .	$ CALL
ESDI	CALL	SCSI	CALL

ON-SITE REPAIR/SERVICE

PROFESSIONAL QUALITY SERVICE & SUPPORT

- Same Day On Site Service
- Hassle-Free Upgrades & Repair
- IBM & All Compatibles
- Flat Fee Plus Parts

CALL US TODAY FOR OUR NEW PRODUCT & PRICE LIST

SALES CALL PH # (310) 219-2100
SERVICE CALL PH # (310) 676-0487

12567 CRENSHAW BLVD., HAWTHORNE, CA 90250

probably due for a resurgence.

There's a new value, if you look at places like The WELL, like our forums, like Usenet, of people that can find the crucial piece of information, synopsize the argument, crystallize the issue at hand—those people are highly valued at this point.

That to me will be one of the neatest things—as we kind of muddle through hybridizing the automatic technologies with the stuff that really puts people back in the system, puts people back in the feedback loop. That'll be pretty interesting, particularly as you try to span it across cultures and languages.

The Internet, to some extent, is the big Petri dish of that, the clash of cultures. Anybody that has ever followed *soc.culture.whatever* has seen them in action, because that's where people bring their old wars, their old hatreds, onto the nets.

And their old obsessions with really silly things.

Yeah, and in some cases don't realize how silly they're looking. The culture of the Net—and thank heavens, for the most part—is a more tolerant culture. You can't punch the guy in the nose, you can either ignore him or flame him. But the worst you can do is burn up some bandwidth. It's certainly better than shooting each other.

Why I like being in this business—to me if you've grown up twenty years from now, since being a kid, with having pervasive person-to-person worldwide communication, it's going to be a lot harder to shoot the other person.

I hope it's true.

And it's going to start "from the top down." It's always going to be the cognoscenti, the people at the top of that pyramid in any particular culture that get their hands on it first. Some of them are going to have trouble with it—it was just a couple of months ago that the first live node in Kuwait went up. There are some cultures that may have a little trouble coping with Net culture.

Singapore's going to have a real problem.

Well, Singapore's been live for some time. I don't know exactly how they're dealing with that, but I have regular correspondences with my friends down there. It's a research hub.

But again, you're dealing with that peak of the pyramid. The sophisticates. The people in the research labs, in industry, and so on. It's if it starts getting pervasive, moving out into the culture, to where they get the latter-day equivalent of a cheap Mac or a Sega machine and it comes with a CompuServe client or whatever we look like at that point built into it—that's when life is going to get kind of interesting.

If you want a precedent for what may occur culturally, just take a look at what Rupert Murdoch is running into as he attempts to take satellite TV into the Third World—a lot of resistance. There's a lot of people out there that took a lesson from part of how the Soviet Union fell, that you could almost look at communication as being a sort of solvent poured upon regimes of that sort.

"We like our culture the way it is, thank you."

Thank you very much. In other words, we like the culture with us running it, is the interpretation you could take in some cases.

So there's a lot of change ahead. But you could also see that putting up the barriers to it is probably the best way of ensuring you're going to be noncompetitive in the next century, that if you try to make an island of yourself and don't participate—

You'll be Albania.

An information Albania, yes. Having that pervasive in your citizenry, to where they're all enabled to communicate in that fashion, is going to be the only way to really get into the global economy and participate with scale.

So if you try to draw a line around—pick your favorite example—Burma, and say we're not going to plug in, fifty years from now you're going to be in sad shape. What you will find is that the people that have that ability are going to leave, and that societies like ours will benefit from it. You'll end up having, to coin a term, information refugees, that realize that the only way they're ever going to realize their potential is to get out of that circumstance and into a place where they can really play.

And there's a whole nother question that will face me, because stacked up behind French and German and Spanish is, of course, moving into Chinese, Japanese, and all the Eastern Eurpoean languages. It's an opening market.

Is Arabic an opening market at this point?

Doesn't seem to be at this point, but Hindi could get very interesting. It's a very easy leading indicator—are PCs becoming pervasive? There's your market. Because they'll lead, we follow. ■

MORE COMPUTER BUYS - FROM FRY"S!

AMBRA
486SX 25MHz COLOR NOTEBOOK

- 4MB RAM
- 170MB Hard Drive
- Trackball
- 1.44MB External Floppy Drive
- 7.8" Color Screen
- Trackball

Limited to Supply on Hand!

$1195

#1987818

EPSON
Action Note 650C
486DX2-50MHz
Dual Scan Color Notebook

- 4MB RFAM
- 1.44MB Floppy
- 260MB Hard Drive
- Trackball PCMCIA
- DOS
- Windows™

$1999

#1984882

Avanti
486DX2-66MHz 200MB COLOR NOTEBOOK

- 486DX2-66MHz
- 4MB RAM
- 200MB Hard Drive
- 3.5" 1.44MB Floppy Drive
- MS DOS
- Windows
- PCMCIA II
- Trackball

$1999

#1914870

AMBRA
486DX4-75MHz DUAL SCAN COLOR NOTEBOOK

- 486DX4-75MHz
- 8MB RAM
- 1.44 Floppy Drive
- 340MB Hard Drive
- Dual Scan Color Screen
- PCMCIA
- Built-In Trackball

$2395

#1988691

LeadingEDGE
AVIVA
486DX2-50MHz 340MB DUAL SCAN COLOR NOTEBOOK

- 486DX2-50MHz CPU
- 4MB RAM
- 340MB Hard Drive
- 3.5" 1.44 Floppy Drive
- SVGA w/1MB VRAM
- 10.3 dual-scan color VGA display

$2188

#1962806

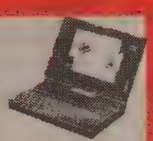
TOSHIBA T1910CS/200
486SX-33MHz 200MB COLOR NOTEBOOK

486SX-33MHz CPU • 4MB RAM Expandable To 20MB
7lbs • 200MB Hard Drive
3.5" 1.44 Floppy Disk Drive
PCMCIA Slot
9.5" Dynamic-STN dual-scan color VGA display with graphics accelerator

$1849

#1885273

SHARP
486DX2-50MHz MULTIMEDIA 250MB ACTIVE MATRIX NOTEBOOK



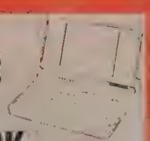
- 486DX2-50MHz CPU
- 250MB Hard Drive
- 4MB RAM
- 1.44 Floppy Disk Drive
- 16-Bit Sound
- Microphone
- Glide Pen

PC-8700

$3188

#1972108

AMBRA
486DX4-100MHz ACTIVE MATRIX COLOR NOTEBOOK



486DX4-100MHz • 4MB RAM • 1.44 Floppy Drive • 450MB Hard Drive • 9.5" Active Color Matrix Screen • PCMCIA
Built-In Trackball
Integrated Sound
One Year Warranty
Remanufactured to original factory specifications

$2999

#1979378

KENSINGTON.
LEATHER NOTEBOOK TRAVELER® CARRY CASE

- Padded computer and printer compartments
- Internal Frame
- Quick Access and Internal Pockets
- Self-Repairing Zipper
- Removable Shoulder Strap

$169

#1956531

Canon
BJ-10SX NOTEBOOK PRINTER

360 dpi • 110 cps • 3.7lbs
30% Faster than BJ-10EX.
Remanufactured to factory specifications

$158

#1951259

PCMCIA 9600/2400B FAX/MODEM

PCMCIA Type II Fax/Modem

$39.95

#1979389

PCMCIA 14,400B FAX/MODEM

PCMCIA 14.400 Fax/Modem

$139.95

#1987650

LINKSYS PCMCIA COMBO

Supports10Base 2 and 10 Base T and BNC COAX • 16K Buffer
128KB Flash Buffer

$179.95

#1936476

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

486DX2/66MHz VESA LOCAL BUS MOTHERBOARD

- VLB 486 Motherboard
- OK Cache expandable to 256K
- OK RAM
- CPU Sold Seperately

$59.95

#1936432

DEEP GREEN 486DX2-66MHz VESA LOCAL BUS MOTHERBOARD

- 486DX2-66MHz VLB
- Deep Green Motherboard
- Power Manager
- Zif Socket
- 72-pin SIMM Socket
- OK Cache expandable to 286K Cache

$89.95

#1967362

486DX4-75/100MHz VESA LOCAL BUS MOTHERBOARD

- VLB 486DX4 Motherboard
- 256K Cache
- Uses 486DX-4/75MHz or 486DX-4/100Mhz
- CPU Sold Seperately

$139.95

#1928073

LeadingEDGE 486DX2-66MHz 420MB VESA LOCAL BUS SYSTEM

486DX2 66MHz Slimline Desktop • 4MB RAM • 420MB Hard Drive • Vesa Local Bus SVGA • 1.44MB Floppy Drive • Mouse • DOS • Windows™
Monitor Not Included
Limited to Supply on Hand!

$969

#1962769

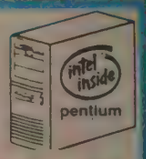
PENTIUM 60MHz 8MB/420MB PCI SYSTEM

Mitac Pentium 60MHz • 8MB RAM
420 MB Hard Drive • 1.44MB Floppy Drive
PCI 1MB SVGA • 104-Key Keyboard
2 Serial/1 Parallel/1 Game Port
Mouse • MS DOS 6.22 • MS Windows™ 3.1 • Mini Tower Case
Monitor Sold Separately

$1399

#1950845

PENTIUM 90MHz TOWER COMPUTER

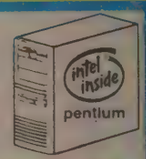


8MB RAM • 540MB Hard Drive • 1.44MB Floppy Drive • PCI 1MB SVGA • Keyboard Mouse • MS DOS • MS Windows™
Monitor Sold Separately

$1999

#1979035

PENTIUM 90MHz TOWER COMPUTER



8MB RAM • 1GB Hard Drive • 1.44MB Floppy Drive • Fax/Modem • Quad-Speed CD-ROM • Tower • Software Titles
Monitor Sold Separately

$2899

#1979046

MINI TOWER COMPUTER CASE WITH POWER SUPPLY

$33.99

#1742428

Panasonic KX-P1150 DOT MATRIX PRINTER

- 240cps draft print speed
- 4K buffer capacity frees up the computer
- Windows 3.1 driver included
- 2 year limited warranty
- 7 Resident fonts

$139

#1839283

brother 6 PAGES PER MINUTE LASER PRINTER

Get the Straight Paper Path Advantage!
Features Include
- 6 ppm laser printer- 50% faster than 4 ppm engines
- Reduces annoying jams and curls
- Prints envelopes reliably
- Prints on different paper stocks and sizes

HL-630
#1943111

$396.99

Charlie Chip Says:
"Your Best Computer Buys are Always at...

Fry's ELECTRONICS

STORAGE CORNER

KAO
10-PACK
3.5" DS/HD
IBM FORMATTED
DISKETTES
$3.99*
*After $2 Mail-In Rebate. In-Store Price $5.99
#1937330

DYSAN
DY2120
120MB
DATA CARTRIDGE
• 1/4" Tape
• Unformatted
$9.99*
*After $2 Mail-In Rebate In-Store Price $11.99
#1781496

1024 X 768
14"
SUPER
VGA MONITOR
• 1024 X 768
• .39 Dot Pitch
• Interlaced
$169
#1983238

SVGA 16-BIT
1024x768
CARD
• Super VGA
• 1024x768
• 256K expandable to 512K RAM
$29.95
#1611564

HITACHI
SuperScan™ 15s
Non-Interlaced
1280 x 1024
15" SUPER
VGA MONITOR
• Non-Interlaced
• 28dpi
• Flat Screen
$395
#1939376

Parana
752 INK REFILL
BLACK TWIN PACK
for HP 51626A cartridge HP DeskJet and DeskWriter series
$14.99
#1889015

PageBrush Color
Hand Scanner
with OCR Software
•100% Microsoft Windows Compatible
• TWAINcompliant
• 100 to 800 dpi resolution
• Scans 16.7 million (24-bit)
• SmartPage Direct OCR software
• Wide stance and rounded grip for ultra-straight scanning
MOUSE SYSTEMS
$189
#1860663

ScanTrac
Guide for
Handheld Scanner
• Increase your OCR's speed to recognize text.
• Scan both sides of a page without moving the artwork.
• Compatible with Pc and MAC scanners.
• Designed to achieve flatbed accuracy at a fraction of the cost.
• Easy to assemble.
$26.99
#1639937

DIAMOND STEALTH
24-BIT 1280 X 1024
VESA LOCAL BUS
GRAPHIC ACCELERATOR
• 24-Bit
• 16 million colors
• 1280 X 1024 MAX
Limited to Supply on Hand!
$98
#17667149

Labtec
MULTIMEDIA
COMPUTER SPEAKERS
High efficiency micro stereo speakers. • 2.25" stereo speakers • 4 ft. cord with 3.5mm stereo plug to fit most personal radios and cassette players
One year warranty
$4.77
SS11
#1931013

Interex
Computer Products
SURGE
PROTECTION
POWER CENTER
• 5-outlet surge protector
• 5 individual controls
• Lighted master on-off switch
$17.49
#1976456

FlightStick
#1 SELLING JOYSTICK
• ULTIMATE CONTROL: Has total 360 degree cursor control
• ADDED THROTTLE CONTROL ON IBM PC MODELS: Gives you better speed control
• DUAL AXIS TRIM CONTROLS
• LINEAR POTENTIOMETERS. Rated at 4 million life cycles
CH products
$34.99
#1704277

KENSINGTON.
POWER
BACKER PLUS
300VAUPS protects against surges, brownouts, and blackouts. Protect Your Data!
$89
#1976478

3.5"
EXTERNAL
SCSI CASE ENCLOSURE
FOR SCSI HARD DISK
W/POWER
SUPPLY
$58
#1930849

Advanced Digital Systems
GAME ZAPPER
VGA TO TV
• For DOS applications
• Great for games
• Includes DOOM Game
• Displays DOS applications on TV
$49.95
#1981443

TARGUS
A TRADITION OF EXCELLENCE
NOTEPAC
Notebook Carrying Case
14" x 11" x 2.5" (Interior Dimensions)
13" x 9" x 2" (Pocket Dimensions)
Compatible with Powerbook and all popular Notebooks
Available In Assorted Colors.
$34.99
#1693283

101-KEY SPILL RESISTANT
KEYBOARD
• IBM compatible
• 5 foot cable w/DIN
ANTEC
K-208
$10.99
#1979356

MOUSE SYSTEMS
2-BUTTON
MOUSE
Microsoft Compatible • 350dpi
Ultra-Resolution
Ballistic Acceleration
Pop-up menus for mouse illiterate programs
$16.99
#1810819

DOCUMENT
QUALITY
WHITE
INKJET
PAPER
DESKJET PRINTERS
• 8-1/2" x 11" in
• 200 Sheet Packs
• 24lbs
$6.99
#1551989

2-WAY
AUTO
SWITCH
Reliable auto switch connects two computers and will switch to one printer
$9.99
#1974867

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

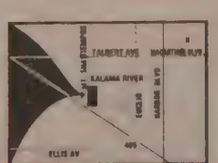
Fry's ELECTRONICS

Prices Good Through February 28, 1995

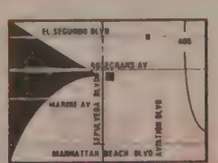
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers



FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444



MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

Macintosh Systems And Monitors

Authorized Reseller

Authorized Reseller

Apple® Macintosh® Performa® 475 4/160

68LC040 Processor • 50/25 MHz Speed • 4MB RAM Expandable to 36MB • 160MB Hard Drive • 256 Colors 7 SCSI Built-in • 14" RGB .28mm Non-Interlaced Display AppleTalk® / LocalTalk® • Digital Sound and Internal Speaker • Sound Out Port • Keyboard • Mouse
Free Software: System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, MacLink Translators Pro, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of American On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers.

$1099

#1942693

Apple® Macintosh® Performa® 575 5/250/CD

68LC040 @ 33 MHz Processor • 250MB Hard Drive 5MB RAM Expandable to 36MB • 1MB VRAM 14" Integrated Macintosh® Color Display with Trinitron Tube Internal AppleCD 300i Plus CD-ROM Drive • Keyboard • Mouse
Free Software: System 7.1P with Launcher, ClarisWorks 2, Quicken 4, At Ease, Click Art Performa Collection, Macintosh PC Exchange, Apple Special Edition of America On-line, American Heritage Dictionary 3rd Edition, Mario Teaches Typing, Spectre Challenger, Super Munchers, Best of Homeworks Templates
CD-ROM Titles: Grolier's Encyclopedia • 1993 Time Magazine Almanac Microsoft® Dinosaurs Wacky Jack's CD Game Show

$1799

#1957738

Apple® Macintosh® Performa® 630CD 8/250

68LC040 @ 66/33 MHz Processor • 8MB RAM Expandable to 36MB • 250MB Hard Drive 32,768 Colors • 7 SCSI Built-in 14" Apple 28mm Non-Interlaced Display • AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM • 16 Bit CD Stereo • Internal Stereo Speakers • Headphone Jack
Free Software: Mac System 7.1P with Quicktime Player Claris Works 2 • Quicken 4 • At Ease • MacLink Plus Translators Pro • Click Art Performa Collection • MAC PC Exchange • New Grolier Multimedia Encyclopedia on CD • Time Almanac CD 3D Atlas CD • Family Doctor CD • American Heritage Dictionary Kid Works • Thinkin' Things • Writing Center Wacky Jacks CD Game Show • Spectre Challenger • Spin Doctor Challenge Dole Five-A Day Adventures CD Cross Wizard

$1899

#1942729

Apple® Macintosh® Performa® 6115CD 8/350

60MHz PowerPC™ 601 Processor • 8MB RAM Expandable to 72MB 350MB Hard Drive • 15" Apple® Multiple Scan Display w/Built-in Speakers • AppleTalk® / LocalTalk® • Double-Speed Internal CD-ROM Global Village 14,400 BPS Modem
Free Software: Mac System 7.5 • Claris Works 2 Quicken 4 • American Heritage Dictionary • Now Up To Date Contact• Click Art Performa Collection • Mac Gallery Clip Art • Macintosh PC Exchange • MacLink Plus Easy Open Translator • E-World • Grolier's Multimedia Encyclopedia CD Time Almanac CD • 3D Atlas CD • Family Doctor CD • Around the World in 80 Days • Kidsoft • Spectre Challenger • Spin Doctor Challenge

$2699

#1966682

PowerPC™ SYSTEMS

PowerPC™ Apple® Power Macintosh™ 6100/66/CD 8MB/500HD

NEW

PowerPC 601 RISC at 66 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 72MB • 350 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
Monitor and Keyboard not included
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

$1899

#1988381

PowerPC™ Apple® Power Macintosh™ 7100/80 8MB/500HD

NEW

PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 136MB • 500 Hard Drive • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
Monitor and Keyboard not included
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

$2729

#1988392

PowerPC™ Apple® Power Macintosh™ 7100/80/CD 8MB/700HD

NEW

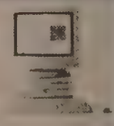
PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 8MB RAM expandable to 136MB • 700 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port, 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive • 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
Monitor and Keyboard not included
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

$3099

#1988406

PowerPC™ Apple® Power Macintosh™ 7100/80/CD/AV 16MB/700HD

NEW

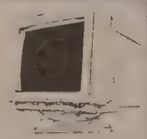


PowerPC 601 RISC at 80 MHZ • 256K level 2 cache, integrated FPU 2MB VRAM Video input/output • 700 Hard Drive • Double-Speed internal CD-ROM • Built-in LocalTalk and Ethernet connections • 2 serial ports (both Geo-Port compatible) • SCSI port • ADB port • 2 monitor port • 16-bit stereo I/O port • Built-in Apple® SuperDrive 1.4MB Floppy disk drive reads, writes formats Macintosh®, Windows, MS DOS, OS/2 and ProDos disks
Monitor and Keyboard not included
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

$3599

#1988417

MAGNAVOX 640 x 480 14" MAC COLOR MONITOR



28 Dot Pitch
640 x 480
Includes Cable
CM2080

$259

#1748516

Apple® Multiple Scan 15" Display

The Apple® Multiple Scan 15 Display is a high-quality monitor. It features
- The state-of-the-art Flat Square Screen and stereo speakers
- Antiglare surface treatment with a flicker-free refresh rate to minimize eyestrain
- 640 by 480pixels to1,024 by 768 pixels
- It includes stereo speakers and a headphone jack.

$467

#1956771

TOSHIBA 1280 x 1024 17" COLOR MONITOR

MULTIPLE FREQUENCY
MAC OR DOS
FLAT SCREEN
DAC (Dynamic Astigmatism Control) focus system with .31mm dot pitch and Invar Mask.
Remanufactured to original factory specifications.

$549

#1888601

Apple® 20" Color Multiple Scan Display

- Multiple-scan technology allows you to adjust resolution
- 20-inch screen Sony Trinitron tube
- Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort
- Complies with the EPA's EnergyStar conservation guidelines
- Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1152 by 870 pixels

$1939

#1897131

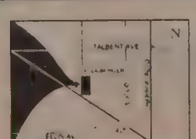
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

ELECTRONICS Fry's

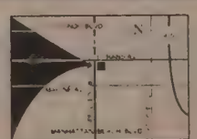
Prices Good Through February 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

Discover, VISA and MasterCard Accepted

Macintosh Accessories and Software

TELEPORT
Teleport Gold II 14.4 Fax Modem for Macintosh®
Includes award winning Global Fax Software.

$129

#1979024

GRAVIS JOY STICK FOR MACINTOSH®
- Arcade Style game controller
- Digital to Analog Technology
- Left or Right handed operation
- 1 year warranty

$44.99

#1440168

ADESSO 105-KEY KEYBOARD FOR MACINTOSH®
w/Trackball and LCD Clock

$59.99*

*After $10 mail-in rebate In-store price $69.99

#1837786

MULTIMEDIA CD-ROM KIT FOR MACINTOSH®
- Double-Speed NEC CD-ROM Drive
- Kodak Photo CD Compatible
- Grolier Multimedia Encyclopedia
- Speakers

$249

#1886171

SupraFAXModem FAX MODEM 28.8 V.34 FOR MACINTOSH®
28,800 bps data/14,400 bps FAX
Easily upgradable
Includes: Caller ID
Top-rated data/fax software
Silent Answer™ fax & voice line sharing
Five-year limited warranty

$239

#1982536

KENSINGTON. MAC TURBO MOUSE TRACKBALL
ADB Trackball for all MAC with an ADB port.

$99.99

#1711392

Apple® StyleWriter® II Printer
The Apple® StyleWriter® II printer, laser-quality printing at an affordable price.
- 360 dots per inch quality
- Multipurpose tray holds up to 100 sheets of paper and 15 envelopes
- Comes with 39 scalable TrueType™ fonts
- Greyshare™ driver software for gray-scale printing
- All Macintosh® products are designed to work together

$267

#1758221

Stylewriter 2400 Color Ink Jet Printer
- 360 dpi resolution
- 64 scalable TrueType fonts
- Compact printer that produces vibrant colors and crisp text

$497

#1966671

SYMANTEC. NORTON UTILITIES 3.1 For Macintosh®
The Norton Utilities is the most powerful collection of tools ever developed for protecting and recovering your data. It proactively prevents trouble by alerting you when problems arise. It recovers data when disaster strikes. It even rescues data from totally trashed disks.

$109.95

MAC
#1955644

Broderbund WHERE IN THE WORLD IS CARMEN SANDIEGO
Carmen Sandiego turns World Geography into a thrilling, crime stopping chase! Get ready to travel the world, meet unusual people-- and arrest them! It is fun for young and first time players.

$34.95

MAC
#1952940

Spectrum HoloByte BREAK THRU! For MACINTOSH®
Break Thur! is a fast-paced addictive puzzle game in the tradition of the award-winning Tetris. Features
- One or two player modes including simultaneous two player action.
- Variable skill settings and multiple levels of increasing speed and challenge

$39.95

MAC
#1963988

VEGAS GAMES FOR MAC
Vegas games entertainment package for Macintosh brings the Multi-player aspect of true casino games to your computer wherever and whenever you want. It comes with five complete games:
- Craps
- Poker
- Baccarat
- Blackjack
- Horse Racing

$19.95

MAC
#1902004

Broderbund LITTLE MONSTER AT SCHOOL
Little Monster at School is based on the best-selling book by Mercer Mayer. It helps children to learn the alphabet, numbers, science and other subjects. It is fun learning for children ages 3-8.

$39.95

MAC
CD-ROM
#1933554

Broderbund MYST CD-ROM FOR MAC
Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit
Mouse, hard disk, System 7.01 or higher and a CD-ROM drive required

$49.95

MAC
CD-ROM
#1838260

Rebel Assault CD-ROM for MACINTOSH®
The best CD-ROM game is now available for the Macintosh. Features Include:
- Astonishing 3-D Graphics
- Over a dozen action-packed levels
- Full screen video from the Star Wars movies
- Digitized Speech and movie sound effects.

$49.95

MAC CD-ROM
#1923964

Velocity SPECTRE VR FOR MAC CD-ROM
Spectre VR is a cyberspace battle game. Features
- Live-action video throughout the entire world
- Build your own virtual world with our VRchitect cyberspace edition
- Hover, soar and glide over the virtual world of your own design

$34.95

MAC
#1923469

Microsoft® ARCADE 1.0 for Macintosh®
Brings you fast-action play of five classic arcade games - right on your Mac! Take a few minutes out of a busy day to defend your turf and rid the universe of evil intruders.MAC

$27.95

MAC
#1958544

ELECTRONIC ARTS PGA TOUR GOLF II
Experience the thrill and challenge of PGA Tour Golf. Includes dynamic wind conditions, 10 different ball lies, random pin placement, accurate ball physics, and a variety of special shots

$42.95

MAC
#1920802

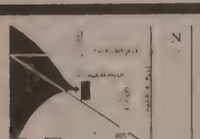
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

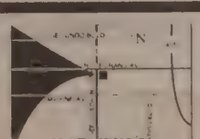
Prices Good Through February 28, 1995

Limit Rights Reserved
Not responsible for typographical errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
Discover, VISA and MasterCard Accepted

Macintosh Accessories and Software

Authorized Reseller

Authorized Reseller

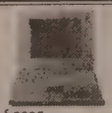
Apple® PowerBook® 150 4/120

The Apple® PowerBook® 150 is the most affordable PowerBook® computer, combining the performance of 33-MHz Motorola 68030 microprocessor with the convenience of a compact, lightweight notebook system
- 9.5" diagonal, backlit passive matrix, grayscale display
- 120MB Hard Drive • 5.5 lbs
- Bundled Software: ClarisWorks 2.1
- PowerBook® Mobility Bundle Software

$1389

#1939538

Apple® PowerBook® 520 4/160



68LC040 Processor • 50/25 MHz Speed
4MB RAM, expandable to 36MB,4MB on board and one memory expansion slot • Internal Apple SuperDrive® Floppy Disk Drive, Internal 160MB Hard Disk Drive • Three expansion slots- One for a processor-direct card, One for an internal modem, and One for RAM • Serial port • ABD™ port • Video-output port • Power adapter port • Sound-input (mono) port and integrated microphone • Sound output (stereo) port and speakers • SCSI port.

$2189

#1916492

Apple® PowerBook® 520c Color 4/160

68LC040 Processor • 50/25 MHz Speed • Passive Matrix Color Display • 4MB RAM, expandable to 36MB • Internal Apple SuperDrive® Floppy Disk Drive, Internal 160MB Hard Disk Drive Three expansion slots- One for a processordirect card, One for an internal modem, and One for RAM • Serial port ABD™ port Video-output port • Power adapter port Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers SCSI port.

$2699

#1916517

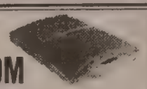
Apple® PowerBook® 540c Color 12/320/M

68LC040 Processor 66/33 MHz Speed • 12MB RAM • Apple SuperDrive® • Floppy Disk Drive 320MB Hard Drive • **Internal Modem** • Three expansion slots- one for a processor-direct card, one for an internal modem, and one for RAM • Serial port • ADB™ port • Video-output port Power adapter port • Sound-input (mono) port and integrated microphone • Sound output (stereo) port and speakers • SCSI port.

$4479

#1916469

RENO PORTABLE EXTERNAL CD-ROM FOR MACINTOSH®



Features:
- SCSI-2, Double Speed, 180ms Portable CD-ROM Player
- Portable: Works with AC Adapter or Batteries
- Photo CD Multi-session Ready
- Includes Stereo Headphones, Carrying Case, ACAdapter, and Cables
- Includes Apple SCSI PowerBook Adapter
- Includes FWB CD-ROM Toolkit

MEDIA VISION
MV-450
#1988071

$299

GLOBAL VILLAGE 19.2 FAX/MODEM FOR APPLE® POWERBOOK 500

$329

#1938179

Apple® PCMCIA Adapter

Works on all 500 series PowerBooks™

$249

#1982318

Apple® Portable StyleWriter® Printer

The Apple® Portable StyleWriter® printer goes anywhere and everywhere with Apple Macintosh® and PowerBook® computers. It delivers high-resolution output, and versatile paper handling, all with smooth, quiet performance. And it even fits inside a briefcase. The Portable StyleWriter® weighs only 4.5 pounds, and works with any PowerBook®, Apple PowerBook Duo®, or Macintosh® computer, using a rechargeable battery or a standard power source. It can print in a horizontal or vertical position, so you can use it in even the most confined spaces, whether you need to print on letterhead, envelopes, labels, or transparencies.

$389

#1820443

Corel Draw Gallery V1.0

Corel Draw Gallery will add flair to your word processing and presentations with over 10,000 clipart images. It includes Corel Professional photo sampler.

$39.95

MAC
#1923517

Softkey KEY CAD COMPLETE

Key CAD Complete is the next generation that puts high performance CAD at your fingertips. You can produce drawings, plans and layouts to perfect scale and accuracy. But that's only the beginning, with Key CAD Complete, the only limit is your imagination.

$24.95

MAC
#1962965

MICROSOFT® WORKS 4.0 FOR MACINTOSH®

Gives you the right tools for your home, school, or business needs- word processing, financial analysis, database management, charting, and illustration, plus a new calendar to help you keep track of appointments.

$99.95

MAC
#1920488

Intuit QUICKEN 5.0 for Macintosh®

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

$39.95

MAC
#1955921

CLARIS CLARIS ORGANIZER FOR MACINTOSH®

Claris Organizer gives you three things you've been searching for in a Personal Information Manager
- Easy to use program of tasks, calendar, contacts and notes.
- Automatic linking of calendar, to do list, phone numbers and addresses.
- New low introductory price

$69.95

MAC
#1954104

BERKELEY SYSTEMS Expresso Calendar

Express Calendar is an easy to use calendar, address book, and to-do list. Features include:
- always available and accessible
- 20 Calendar styles
- Works like pen and paper

$45.95

MAC
#1959040

BERKELEY SYSTEMS After Dark 3.0 for Macintosh®

The best in screen saver software, just got better with:
- Over 30 displays, 15 of them are new.
- Ecologic power manager
- Multi-module
- Password protection
- Power Mac compatible

$29.95

MAC
#1933392

DELRINA FARSIDE SCREEN SAVER FOR MAC

The Farside Screen Saver collection brings the unpredictable, off-beat humor of the Farside to life through 14 full-color, incredibly detailed screen saver animations.

$29.95

MAC
#1934382

Apple® Macintosh® System 7.5

New System 7.5 boosts your productivity and enables you to collaborate with others more effectively. It speeds up repetitive tasks, lets you swap files with PCs and allows you to open Macintosh, DOS, or Windows documents.

$89.95

MAC
#1949885

Microsoft® Word 6.0 Upgrade for MACINTOSH®

Special upgrade for users of Microsoft Word 5.0/5.1 or earlier.

$124.95

MAC
#1951455

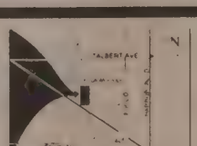
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

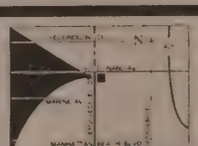
Prices Good Through February 28, 1995

Limit Rights Reserved
Not responsible for typographical errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



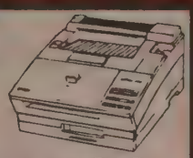
Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
Discover, VISA and MasterCard Accepted

EPSON®

WHEN YOU'VE GOT AN EPSON
YOU'VE GOT A LOT OF COMPANY

EPSON Action Laser™ 1500



- Fast six pages per minute print speed.
- HP LaserJet III and Epson dot matrix compatible
- 27 resident fonts, 13 scalable
- 1MB memory expandable to 5MB
- 300 dpi resolution wRIT
- Built-in parallel & serial interface
- 2-year limited warranty

$479

#1798706

EPSON Action Laser™ 1400

The Best Value In True 600 dpi Laser printing

- 600 dpi printing with Edge Smoothing Technology
- PCL 5e Compatible
- 2MB Memory with Image Compression Technology
- Printer Conntrol Panel Software for Windows and DOS
- 45 Scalable Fonts, 10 TrueType Compatible

$699.99

#1984930

EPSON Action Laser™ 1100

Advanced laser printing at a personal laser price.

- 300 dpi printing with Edge Smoothing Technology
- PCL 5e Compatible
- 1MB Memory with Image Compression Technology
- Toner Saving Mode
- Printer Control Panel Software for Windows™ and DOS
- 22 Fonts, 8Scalable

$397

#1986389

EPSON LQ-570+ 24 PIN PRINTER WITH SCALABLE FONTS!

- 80 Column
- 269 CPS Draft Mode
- 112 CPS Letter Quality
- Four Scalable Fonts
- 360 dpi with Optional Film Ribbon

$248

#1612004

EPSON Stylus 800 Plus

High Definition Inkjet Printing that Sets the Standard.

- Exclusive Epson Stylus Technology
- Improved grayscale graphics
- Your choice of fonts
- Windows™ compatible

$229.99

#1950214

EPSON Stylus COLOR INKJET PRINTER

- 720X720 dpi
- 16 million colors
- 2 year warranty

$509

#1945412

digital PRINTERS

digital DECwriter 65 COLOR DOT MATRIX PRINTER

- 24-wire color dot matrix printer
- Printer speed up to to 2.8 pages per minute (260x360 dpi)
- Built-in 50-page sheet feeder
- High quality color for home or office
- Two Year Warranty

$159.99*

*After $20 Mail-In Rebate In-Store Price $173.99

#1907342

digital DECcolorwriter 120ic COLOR INKJET PRINTER

- Low-cost color thermal inkjet printer
- Print speed up to 3 pages per minute
- Built-in 70-page sheet feeder
- Laser quality at dot-matrix price
- MS Windows™ driver included
- 2-year warranty

$299.99

#1907261

digital DEC Laser 1152 POSTSCRIPT LEVEL 2 LASER PRINTER

- 300 X 300 dots per inch
- Printer speed up to to 4 pages per minute
- Paper Types: Cutsheet, labels, transparencies and envelopes
- 2MB memory upgradable to 4MB
- 17 Adobe PostScript fonts, upgradable to 43 fonts.
- Serial/Parallel AppleTalk interfaces

$699

#1907227

digital DEClaser 5100 POSTSCRIPT LEVEL 2 LASER PRINTER

- 600 X 600 dots per inch
- Printer speed up to to 8 pages per minute
- Adobe Level 2 PostScript with 73 Adobe fonts
- 2MB memory upgradable to 66MB
- Serial, Parallel and AppleTalk interfaces
- Built-in 250-page sheet feeder

$1149

#1907319

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through February 28, 1995

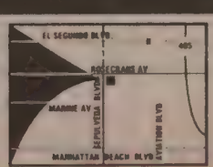
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS

MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

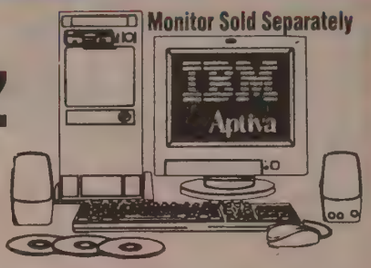


MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

FRY'S Will Beat Any IBM Price in Town...

IBM Aptiva 310
486SX-33MHz
270MB/4MB MULTIMEDIA SYSTEM



Monitor Sold Separately

$1179

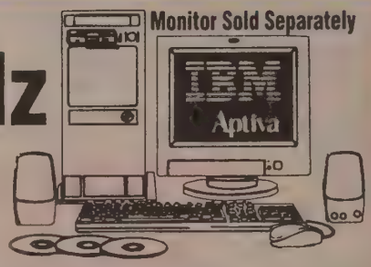
Intel 486SX 33MHz CPU • 270MB Hard Drive • 4MB RAM expandable to 64MB 3.5" 1.44MB Floppy Drive • Internal Fax/Modem • Local Bus SVGA • Smart Energy System Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
Preloaded Software: DOS 6.3 • MS Windows™ 3.11 • Prodigy ® Quicken SE Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection IBM Housecall • P/S1 Tutorial, Index, • PS/1 Edition American On-line **Preloaded Multimedia Software:** Compton's Encyclopedia • The Discovers Undersea Adventure IBM Photo Display • Recording Session • Introduction to Multimedia Monologue for Windows™ • Sound Card Utilities • MCSMusic Rack Music Mentor
IBM Quality & Reliability, Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

#1949542

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service

IBM Aptiva 330
486SX2-50MHz
340MB MINI TOWER SYSTEM



Monitor Sold Separately

$1369

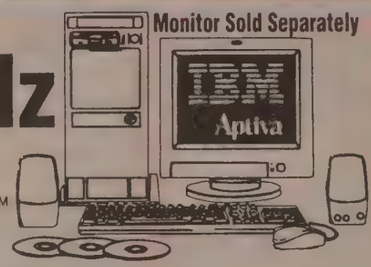
Intel 486SX2-50MHz CPU • 340MB Hard Drive • 4MB RAM, expandable to 64MB 1MB VRAM • 3.5" 1.44MB Floppy Drive • Internal Fax/Modem • Local Bus SVGA • Smart Energy System • Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
Preloaded Software: DOS 6.3 • MS Windows™ 3.11 • Prodigy ® Quicken SE • Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection • IBM Housecall P/S1 Tutorial, Index, • PS/1 Edition American On-line
Preloaded Multimedia Software: Compton's Encyclopedia • The Discovers • Undersea Adventure • IBM Photo Display • Recording Session • Introduction to Multimedia • Monologue for Windows™ Sound Card Utilities • MCSMusic Rack • Music Mentor
IBM Quality & Reliability, Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

#1949531

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service

IBM Aptiva 350
486DX2-66MHz
540MB MINI TOWER SYSTEM



Monitor Sold Separately

$1695

Intel 486DX2-66MHz CPU • 540MB Hard Drive • 4MB RAM, expandable to 64MB • 1MB VRAM 8K Cache • 3.5" 1.44MB/5.25" 1.2MB Floppy Drives • Internal Fax/Modem • Local Bus SVGA Smart Energy System • Double Speed CD-ROM • Sound Blaster 16 Sound Card • Speakers
Preloaded Software: DOS 6.3 • MS Windows™ 3.11 • PRODIGY ® Quicken SE • Faxworks Reuter's Money Network • Journalist • IBM Club • IBM Connection • IBM Housecall • P/S1 Tutorial, Index, • PS/1 Edition American On-line
Preloaded Multimedia Software: Compton's Encyclopedia • The Discovers Undersea Adventure • IBM Photo Display • Recording Session • Introduction to Multimedia • Monologue for Windows™ • Sound Card Utilities • MCSMusic Rack • Music Mentor
IBM Quality & Reliability, Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.

#1949520

IBM®

*IBM and Personal System/1 are registered trademarks of International Business Machines Corporation. The Energy Star Emblem does not represent EPA endorsement of any product or service.

WE GUARANTEE IT!

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

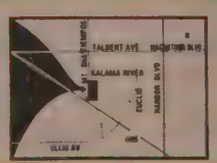
FRY'S ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers



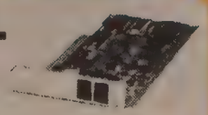
FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

MODEMS

14,400 BPS INTERNAL DATA/FAX MODEM



Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751420

AT&T Dataport Express

$99.99

14,400 BPS EXTERNAL DATA/FAX MODEM

Data Compression ITU V.42 bis or MNP Class 5
- Error Correction ITU V.42 or MNP Class 2-4
- Saves long distance phone costs through faster transmissions
- Improves worker productivity w/faster data transfer and reliable connections
- Protects your investment with a 5 year warranty, backed by AT&T

#1751419

AT&T Dataport Express

$119.99

14,400 BAUD INTERNAL FAX/MODEM

GROUP 3 Compatible • 16550 UART
BITCOM and BITFAX S/W • Supports up to Com 7 and IRQ-9
5 Year Warranty
#1930078

SIIG, Inc.

$59.99

2400 BAUD INTERNAL MODEM

MNP 2-5, v.23 BIS.
Hayes Compatible
for IBM PC
5 Year Warranty
#1966730

$12.99

TheComplete PC Communicator Gold INTERNAL 14,400 BAUD FAX/MODEM w/VOICE MAIL

MNP5 and V.42 bis • Data throughput up to 57,600bps
- Group III Fax w/16550 UART
- 1000 password protected mailboxes

#1906422

$149.99

SUPRA 144I PLUS EXPRESS 14,400 BPS INTERNAL FAX/MODEM

- V.42,V.42bis, MNP 2-5
- 5-year limited warranty
- Fax Talk, COMit,CIM Software
- Includes hardware-based compression and error correction for greater efficiency

#1984174

Supra Corporation

NEW

$86

14,400 BPS EXTERNAL FAX/MODEM

V.32 bis, V.42 bis, MNP 2-5 • Windows and DOS Software
800 Toll-Free Technical Support
#1950982

$74.99

Prometheus™ 14,400 BPS INTERNAL FAX/MODEM

V.42, V.42 bis
Maxfax Software
5 Year Warranty
#1968558

$58

Hayes ACCURA EXTERNAL 14,400 BPS FAX/MODEM

- Free SmartCom Data and Fax Software
- Group 3 Fax
- V.42, V.42bis, MNP 2-5
- Cables included

08-01174
#1798201

$129.99

Hayes ACCURA INTERNAL 14,400 BAUD FAX/MODEM

Free SmartCom Data and Fax Software • Group 3 Fax
V.42, V.42bis, MNP 2-5
Cables included
08-01185
#1798197

$99.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

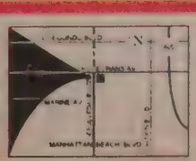
Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved Not responsible for typographical errors.

STORE HOURS
MONDAY -FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER
NOVUS
VISA
MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED.

MODEMS

PRACTICAL PERIPHERALS FaxMe

Introducing the plug-in cartridge that turns a HP LaserJet printer into a plain paper receive FAX machine.
FaxMe turns your HP printer into a receive only fax machine. It is compatible with all Group III fax machines and will receive at 9,600, 4,800, or 2400 BPS. FaxMe runs without software and without a computer.
Lifetime Warranty.
#1741771

$69

Prometheus™ EXTERNAL 14,400 BAUD FAX/MODEM

for Windows and DOS
Includes MaxFax Software from Prometheus
#1843660

$89.99

BEST DATA ACE 14,400 BPS FAX/MODEM VOICE MAIL/SOUND

THE ALL IN ONE BOARD FOR SOUND AND COMUNICATIONS
V.Fast Upgradable • 16-Bit Stereo
DSP Software Upgradable
#1871782

$199.99

PRACTICAL PERIPHERALS 14,400 BAUD INTERNAL FAX/MODEM

14,400 Baud Modem/Fax
Super High Speed V.32 BIS Protocol
Quick Link II communication Software
#1667912

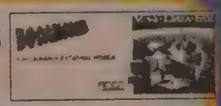
$98

PRACTICAL PERIPHERALS 14,400 BAUD MINI TOWER FAX/MODEM EXTERNAL

V.32 and V.42 Bis
Quick Link II Communication Software
#1757781

$129.99

BOCAMODEM V.34 28,800 bps External Fax/Modem



New International Standard
- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Troughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card Included
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981878

$239.99

BOCAMODEM V.34 28,800 bps Internal Fax/Modem

New International Standard
- 28,800bps Data Modem
- 14,400bps Send/Receive Group 3 Fax
- V.42bis Data Compression for Troughput Up to 115,200bps
- High-Speed 16C550 UART Serial Card on board
- Backward Compatible with V.Fast Class (V.FC) and Lower Speed Modems
- Five Year Warranty

#1981867

$199.99

BOCA SoundExpression 14.4VSp

Transform your ordinary PC into a powerful multimedia/communications workstation
- 16-bit Multimedia Stereo Sound
- Voice Mail
- 14,400bps Send/Receive Fax/Data Modem
- Speakerphone
- Five Year Warranty

#1981889

$189.99

Prometheus™ INTERNAL 14,400 BPS FAX/MODEM VOICE CARD

- 14,400 BPS Fax Modem wth Voice Mail
- V.42
- V.42 bis
- 5 Years Warranty

#1968581

$99.99

Telecoupler II

High Speed Modem Coupler

CONNECTS A PORTABLE COMPUTER TO ANY TELEPHONE EASILY.
- Accoustic coupling with telephone handset
- Industry standard telephone to modern connector RJ-11
- Full or Half Duplex Communication Mode

#1847790

$109

CPt

14,400 BPS INTERNAL FAX/MODEM

V.32 bis, V.42 bis, MNP 2-5 • Windows and DOS Software
• 800 Toll-Free Technical Support
#1950971

$58

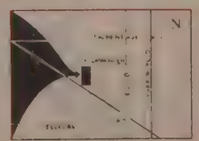
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

FRY'S ELECTRONICS

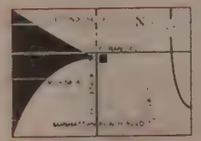
Prices Good Through February 28, 1995

Limit Rights Reserved Not responsible for typographical errors.

STORE HOURS
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



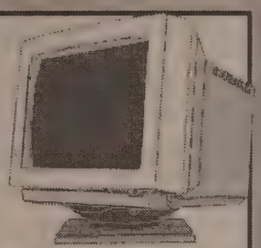
Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED.

MONITORS

NON-INTERLACED
1024 X 768
.28mm DOT PITCH

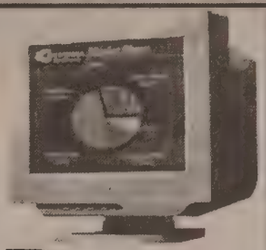


14" SUPER VGA MONITOR

One Year Warranty
#1657506

$199

SONY.
1024 X 768
.25mm Super Fine Dot Pitch



14" SUPER VGA MONITOR

MPR-II • Energy Star Conpliant
#1968868

$299

15" SUPER VGA MONITOR

NON-INTERLACED
1280 x 1024
.28mm DOT PITCH

#1983744

$277

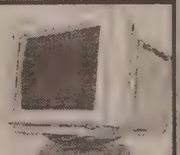
SONY.
CPD-15FS
1280 x 1024

15" SUPER VGA MONITOR

15" 1280 X 1024 Resolution • Flat Trinitron Screen
Energy Star Compliant
#1928095

$414

MITAC
NON-INTERLACED
1280 x 1024



17" SUPER VGA MONITOR
w/DIGITAL CONTROL

#1983515

$649

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

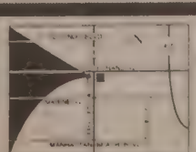
Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved
Not responsible for typographical errors

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

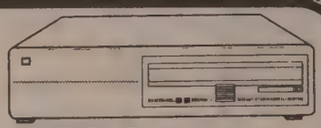


Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED.

HARD DRIVES FOR MAC

270MB Syquest Removable Hard Disk Ideal for Back-ups!

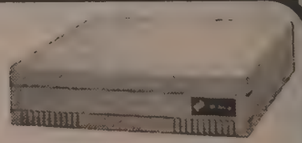


- Cables, terminator, and formation software included
- 3.5", 270MB cartridge included!

#1979013

$529

340MB EXTERNAL HARD DRIVE FOR MAC



MODEL 340
#1850659

NU DESIGN

$329

270MB EXTERNAL HARD DRIVE FOR MAC

MODEL 210
#1838628

NU DESIGN **$289**

540MB EXTERNAL HARD DRIVE FOR MAC

#1850671

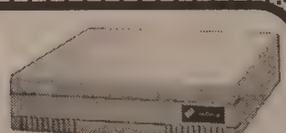
NU DESIGN **$429**

1.2 GIGABYTE EXTERNAL HARD DRIVE FOR MAC

MODEL 1.2
#1850682

NU DESIGN **$699**

MAGNETO OPTICAL 230MB REWRITABLE FOR MAC



#1992388

NU DESIGN **$797**

EXTERNAL SYQUEST 88C MAC

88MB EXTERNAL SYQUEST
FOR MACINTOSH
Read 44MB Write 88MB Syquest
SYQ88C
#1838721

NU DESIGN **$399**

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

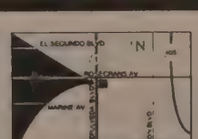
Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY - FRIDAY
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

SCSI HARD DRIVES

CONNER

170MB SCSI HARD DRIVE

3.5" X 1" HT.
14msec
CFA--170S
#1986482

$115

Maxtor

345MB SCSI HARD DRIVE

3.5" X 1"HT.
14msec Access
7345S
#1807673

$169

Quantum™

540MB SCSI HARD DRIVE

1" ht. • 12ms Access • 300,000MTBF • 2 Year Warranty
128K Cache
#1899029
Maverick 2M30540MVS

$258

CONNER

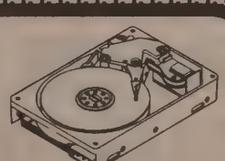
1.06 GIGABYTE SCSI - II HARD DRIVE

1" SIZE • 9MSEC FAST ACCESS • 256K CACHE
SMALLEST 1 GIGABYTE
#1844890

$499

HEWLETT PACKARD

1.2 GIGABYTE SCSI-II HARD DRIVE



- 9msec Access
- 512K Buffer
- 3.5" x 1" Ht.
- 5 Year Warranty

#1965935

$559

digital

3.0 GIGABYTE SCSI HARD DRIVE

12msec Access • Fast SCSI-II
5.25" Full Ht. • 90 day warranty
#1971738

$1199

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

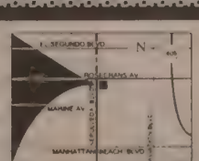
ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved Not responsible for typographical errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

IDE HARD DRIVES

Maxtor
345MB IDE HARD DRIVE

1" HT. • 15ms Access Time • 345MB Formatted Capacity
MAXTOR 7345A
#1781762

$159

Limited to supply on hand.

FUJITSU
525MB IDE HARD DRIVE

12msec Access • IDE • 3.5" x 1" Ht.
#1981845

$195

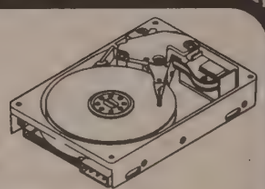
Limited to supply on hand.

420MB IDE HARD DRIVE

3.5" x 1" ht.
#1920787

$175

Maxtor
420MB IDE HARD DRIVE



3.5" x 1" Ht.
12 msec Access Time
256K Buffer
7420AV #1972979

$185

CONNER
540MB IDE HARD DRIVE

3.5" X 1"HT. • 12msec Access
CFA540A
#1802210

$219

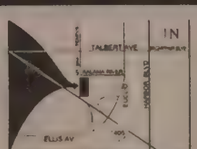
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved Not responsible for typographical errors

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

HARD DRIVES

IBM

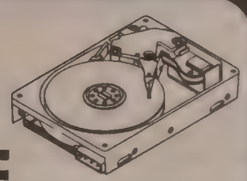
728MB IDE HARD DRIVE

12msec
3.5" x 1" ht.
#1983870

$288

IBM

1 GIGABYTE ENHANCED IDE HARD DRIVE



12msec • 3.5" x 1" ht.
#1983881

$469

Western Digital 1.08 GIGABYTE IDE HARD DRIVE

- 11 MSec Fast Access Time
- 3.5" x 1" ht
- Enhanced IDE

WD AC3100
#1960860

$479

CONNER

850MB ENHANCED IDE HARD DRIVE

- 1" x 3.5" Size
- 12MSec Access
- 256K Buffer

CFA850A
#1981513

$319

CONNER

1.2 GIGABYTE IDE HARD DRIVE

- 3.5" ENHANCED IDE
- 12msec Access
- 256K Buffer
- CFA1275A

#1981524

$499

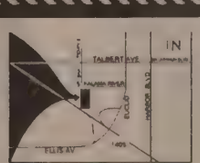
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS

VISA

MasterCard

YOUR BEST STORAGE TAPE BUYS ARE ALWAYS AT FRY'S!!

SUMMIT
MEMORY SYSTEMS INC

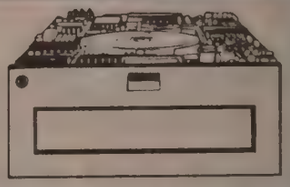
250MB TAPE BACK-UP

250MB Internal Tape Backup
Runs off of Floppy Controller
Central Point Software For Windows & DOS • 2 Year Warranty

$119

SE250
#1635586

CONNER
TAPE•STOR



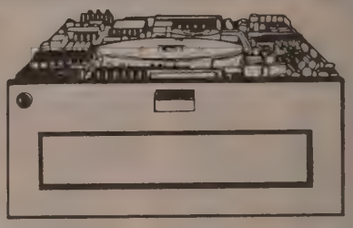
250MB INTERNAL TAPE BACK-UP

Uses DC2120 Tape Cartridge
C250MQT

$127

#1825747

COLORADO
MEMORY SYSTEMS INC.



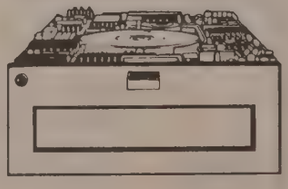
Jumbo 350 Internal Tape Backup System

- Up to 9.3MB/Minute Back-up Speed
- 500Kbps/1Mbps Dual Transfer Rate
- Floppy Controller
- QIC-80.Reads QIC-40 Tapes
- Colorado® Backup for DOS and Colorado Backup for Windows™ Lite Included

$167

DJ-35C
#1974993

CONNER



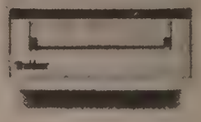
420MB INTERNAL TAPE DRIVE

- Plugs to floppy controller
- Includes 420MB tape cartridge

$177

#1975019

COLORADO
MEMORY SYSTEMS INC.



Trakker 680MB External Tape Back-up

Plugs to parallel port

$479

JT-25
#1975008

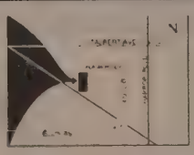
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

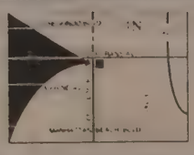
Prices Good Through February 28, 1994

Limit Rights Reserved Not responsible for typographical errors

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

Discover, Visa and MasterCard Accepted

CD-ROM DRIVES AND SPEAKERS

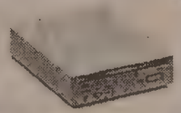
TEAC SuperQuad 4X Quad-Speed CD-ROM Drive

- 600 KB/S Transfer Rate
- 195ms Access Time
- AT Interface and Cable
- SuperQuad 4X

CD-55
#1954528

$319

PLEXTOR Formerly Texel INTERNAL QUAD-SPEED CD-ROM



SCSI CD-ROM
150ms Access
600KB/sec Transfer Rate
1MB Buffer
2 Year Warranty
TXL-PX-43CH
#1934957

$429

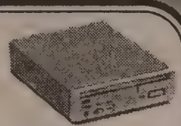
NEC MULTISPIN 4xi

- Internal Quad Speed CD-ROM
- 600 KB/SEC transfer rate
- 220ms Access Time
- 256k cache

#1963933

$399

Sun Moon Star INTERNAL CD-ROM DRIVE



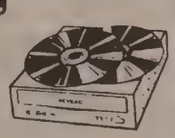
SONY CDU-55E with Controller Card

- 250 ms access time
- 256 KB cache memory
- 300KB per second Data Transfer Rate
- Multi session Kodak Photo CD

CDU-55E
#1981683

$149.99

"EDUCATOR" COLLECTION Multimedia Kit



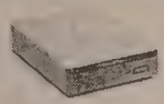
Internal • Double-Speed 320ms access time, 300KB/S data transfer rate • Multisession, Photo CD ready Cable, Mounting hardware, and installation video.

15 CD SOFTWARE TITLES
CDD24
#1916942

REVEAL

$229.99

DOUBLE SPEED CD-ROM KIT



- 250 ms Access Time
- 300 KB/S Transfer Rate
- With interface card

#1964853

FREE 10 Software Titles!

$139.99

Portable CD-ROM Player

MEDIA VISION

Double-Speed CD-ROM Drive
- Data transfer rate: 306KB/sec
- Access time: 180ms
- Interface: SCS12
- Photo CD multi-session compatible
- Stereo headphones
- Protective carrying case
- AC adapter & cables included

#1901117

$298

CREATIVE MULTIMEDIA SPEAKERS SBS-300

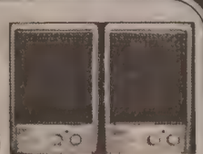
CREATIVE LABS, INC.

Enhance your multimedia experience. Provides endless hours of deep acoustic audio reproduction. Includes 14v DC power supply.

#1829062

$99.99

Labtec CD-I SPEAKERS



- Shielded Computer Speakers
- Works with Sound Cards that have 3.5mm jacks
- 3.6 Watts x 2

CD-1
#1945331

$11.99

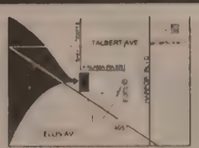
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA

Discover, VISA and MasterCard Accepted

3M STORAGE MEDIA

DC2120 120MB UNFORMATTED DATA CARTRIDGE
Extended Length Version of DC2080 120MB - 307.5 ft of tape
$12.99
#1490750

DC2120 XiMAT FORMATTED DATA CARTRIDGE
120MB - 307.5 ft of tape
$14.99
#1551381

DC2120 2 PACK UNFORMATTED DATA CARTRIDGE
$24.99
#1786158

DC2120 XIMAT 2PK FORMATTED DATA CARTRIDGE
120MB and 250MB formatted Works with DJ20, Jumbo 250, Trakker 250 and Summit SE250
$28.99
#1786169

D8-112 8MM 5GB DATA CARTRIDGE
112Ft. Long • Compatible with all 2.3GB,2.5GB and 5GB Tape Drives
$10.49
#1620968

DDS-90 4MM DATA CARTRIDGE
2 Gigabyte 4mm, 90 meters long • Helical Scan Data Grade Certified
$12.99
DDS-90
#1865679

40 MB DC2000 DATA CARTRIDGE UNFORMATTED
$10.99
#122411

40 MB DC2000 KAPPAMAT DATA CARTRIDGE FORMATTED
$19.49
#122422

60MB DC600A DATA CARTRIDGE UNFORMATTED
$14.99
#122433

DC 6150 DATA CARTRIDGES
154MB • Unformatted 32 Tracks • 1/4 inch
$13.99
#1405482

80 MB DC2080 RHOMAT DATA CARTRIDGE FORMATTED
$17.49
#1439898

DC2120 RHOMAT FORMATTED DATA CARTRIDGE
Extended Length Version of DC2080 120MB - 307.5 ft of tape
$19.99
#1490761

DC2165 NUMAT FORMATTED DATA CARTRIDGE
Extended Length. 128MB - 307.5 ft of tape
$28.95
#1490772

DC 6250 DATA CARTRIDGES
154MB • Unformatted 32 Tracks • 1/4 inch
$18.99
#1490819

DC 6525 DATA CARTRIDGES
154MB • Unformatted 32 Tracks • 1/4 inch
$25.99
#1490820

40 MB DC2000 THETAMAT DATA CARTRIDGE FORMATTED
$13.99
#1495744

60 MB DC2060 KAPPAMAT DATA CARTRIDGE FORMATTED
$25.99
#1551417

DC 6320 DATA CARTRIDGES
154MB • Unformatted 32 Tracks • 1/4 inch
$21.99
#1551532

80MB DC2080 XIMAT DATA CARTRIDGE FORMATTED
$13.99
#1611531

80MB DC2080 DATA CARTRIDGE UNFORMATTED
$14.49
#1612521

60MB DC300XL/P DATA CARTRIDGE UNFORMATTED
$12.99
#1632929

DC2060 THETAMAT DATA CARTRIDGE
$21.99
#1662180

5-1/4" DS/HD DISKETTES UNFORMATTED
1.2 MB AT Compatible
BOX OF 10 $6.49
#121330

5-1/4" DS/HD FORMATTED DISKETTES
BOX OF 10 $6.99
#1500341

5-1/4" DS/DD DISKETTES UNFORMATTED
BOX OF 10 $4.49
#97501

5-1/4" DS/DD FORMATTED DISKETTES
BOX OF 10 $4.99
#1500330

8" DS/DD DISKETTES UNFORMATTED
BOX OF 10 $26.99
#1611542

3.5" DS/HD DISKETTES UNFORMATTED
BOX OF 10
#121327
$5.49*
*After purchase of 2-ten packs and after $4 Mail-in Rebate In-store price for 1-ten pack $7.49

3.5" DS/HD FORMATTED DISKETTES
BOX OF 10
#1500329
$5.99*
*After purchase of 2-ten packs and after $4 Mail-in Rebate In-store price for 1-ten pack $7.99

3.5" DS/HD MACINTOSH FORMATTED HI-DENSITY DISKETTES
BOX OF 10
#1563308
$6.49*
*After purchase of 2-ten packs and after $4 Mail-in Rebate In-store price for 1-ten pack $8.49

3.5" DS/DD DISKETTES UNFORMATTED
BOX OF 10 $6.49
#121288

3.5" DS/DD DISKETTES FORMATTED
BOX OF 10 $6.99
#1500318

3.5" DS/DD MACINTOSH FORMATTED DISKETTES
BOX OF 10 $6.99
#1563294

3.5" DS/HD 20-PACK IBM FORMATTED HIGH DENSITY FLOPPY DISKS
After $4 Mail-in Rebate In-store Price $15.95
$11.95*
#1921434

21MB FLOPTICAL FOR 21MB FLOPTICAL DRIVES
5-DISK PACK $89.95
#1661341

RE-WRITABLE 3.5" MAGNETO OPTICAL MEDIA 128MB
$44.99
#1661352

MAGNUS 1.2 DATA CARTRIDGE FOR COLORADO POWERTAPE 2400
UP TO 2.4GB WITH DATA COMPRESSION
$35.99
#1806948

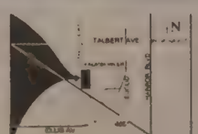
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

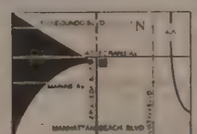
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



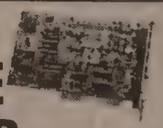
Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
DISCOVER, VISA AND MASTERCARD ACCEPTED

MULTIMEDIA

Prometheus

WAVETABLE SOUND CARD



16-Bit Stereo Sound
32 Operator Wavetable Synthesizer

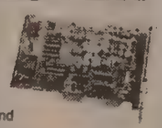
Advanced wavetable synthesis uses real instrument samples. It has the Digital Signal Processor (DSP). Features include Sound Blaster emulation, 16-bit stereo sound, 44.1 kHz record and playback, General MIDI compliant and a joystick port. It is upgradable to speech recognition game

$139.99

#1972083

CREATIVE
CREATIVE LABS, INC.

SOUND BLASTER 16 VALUE



- 8 and 16-bit stereo sampling/playback from 4-44.1 KHz
- Real-time, 16-bit software compression and decompression of sound files
- CD-ROM interface for Creative Labs CD-ROM drives
- Bundled Software: Monologue for Windows and several Creative Labs software utilities
- Windows 3.1, OS/2 and MPC2 compatible

$98.95

#1901818

TeleVideo
MULTIMEDIA

TeleSound Pro 16

- True 16-bit CD-quality stereo sound FM sound board
- Full compatibility with all major sound standard including Sound Blaster, MPU 401, MT-32 and Windows Sound Systems
- 8 and 16 digital recording and playback from4kHz to 44.1kHz sample rate.
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE
- EasyStart installation.

$94.99

#1982053

TeleVideo
MULTIMEDIA

TeleWave Audio 32

- DSP based wave table & FM synthesis combo sound board.
- 32 simultaneous stereo voice polyphony and General MIDI standard support with 128 instruments
- 2 MB of CD-quality sampled instruments sounds store in ROM
- Full Compatibility with all major sound standards including Sound Blaster, MPU 401, MT-32 and Windows Sound Systems.
- Built-in CD-ROM interface supports Sony, Mitsumi, Panasonic and IDE.
- Easy start installation.

$199.99

#1982042

PRO PC/TV PLUS PORTABLE PC-TO-TV ENCODER

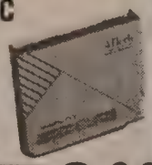
- External VGA-to NTSC converter (VGA to TV/videotape) for your laptop or desktop PC
- Drives both VGA and TV simultaneously
- S-Video (SVHS) output for high quality video recordings/displays
- Anti-flicker circuit for sharp Windows display

AITech **$189.99**

#1821433

MULTIPRO CTV

EXTERNAL VGA-TO-VIDEO/TV ENCODER FOR YOUR PC OR MACINTOSH



- Record, edit or playback audio and video from your PC or Macintosh video output.
- Easy to use and easy to install-just plug and play
- Supports up to 16.7 million (24-bit) colors with standard VGA (640x480) resolution.
- Dual display support cability (VGA monitor and TV/VCR simultaneously).

AITech **$279.99**

#1906835

STUDIO MAGIC

PERSONAL VIDEO STUDIO

PC Video Production Studio with built-in sound, video & computer graphics sequencer.

- Video Overlay/Titler
- Auto Production
- VGA/NTSC Preview Windows
- Transitions
- Chroma/Luma Special Effects

$399.99

#1936122

SCSI-2 Version

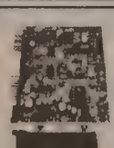
- Premium 16-Bit Sound Card with Award-Winning SRS® 3-D Stereo Sound
- WaveTable Upgradable
- Sound Blaster™ Compatible
- CD-ROM Interface

MEDIA VISION **$149.99**

#1921272

REVEAL

PC RADIO CARD



Tune to your favorite FM station while you work!
Turns your PC into a full featured FM radio.
Enjoy your favorite radio programs or news broadcasts right out of your PC, with this pre-amplified stereo FM card. The easy installation takes minutes. It has advanced features such as fine tune, auto scan, and a programmable 10 station memory

$39.99

REVEAL

#1985816

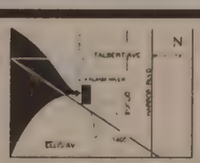
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED

MULTIMEDIA

MULTIMEDIA VALUE KIT

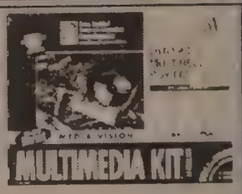
- Double-Speed CD-ROM Drive
- 16 Bit Sound Card
- Speakers, Headphone, Microphone

20 SOFTWARE TITLES!

$199.99

VM300
#1964842

MEDIA VISION MULTIMEDIA KIT



- Double-Speed Sanyo CD-ROM Drive with a 250ms access time
- 16-Bit sound card
- Improved ease of installation
- Speakers

6 Software Titles!

$218

MV1100
#1957554

MEDIA VISION

MULTIMEDIA KIT

REVEAL COMPUTER PRODUCTS

- Double-speed internal CD-ROM Drive
- 16 Bit Stereo Sound Card
- Pair of stereo speakers (RS250)
- Headphones, cables, and installation video

14 Software Titles!

$339.99

MFX03
#1945777

CREATIVE GAME BLASTER CD 16 MULTIMEDIA KIT

CREATIVE LABS, INC.

Get four of today's top ten exciting PC game titles with Game Blaster CD 16. Includes Sound Blaster 16 MultiCD audio card, Creative's Double-Speed Technology CD-ROM drive, high-performance joystick, speakers and an assortment of the hottest-selling games including Iron Helix, Rebel Assault, Sim City 2000 and Return to Zork.

$358

#1901863

CREATIVE SOUND BLASTER MULTIMEDIA OFFICE

CREATIVE LABS, INC.

- Sound Blaster 16 sound card
- Double-Speed CD-ROM
- Speakers, Microphone
- Microsoft™ Office Professional, Microsoft™ Encarta, Microsoft™ Win SoundSystem

$528

#1945825

MULTIMEDIA PACK

- Speakers
- Headphones
- Microphones

FREE! 20 SOFTWARE TITLES!

$19.99

VM400
#1964864

CREATIVE DIGITAL SCHOOL HOUSE KIT

CREATIVE LABS, INC

- SB 16 Value Sound Card
- Double-Speed Internal CD-ROM
- 14 Educational Software Titles

$298

#1966774

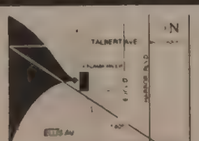
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

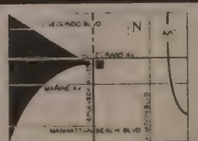
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY-FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

YOU NEED THE RIGHT TOOLS TO BECOME A TOP GUN FLIGHT CONTROLLERS

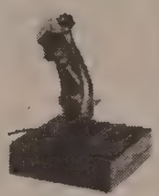
THRUSTMASTER F16-FLCS

Fully programmable stick with four 4-way switches, four buttons, and a two stage trigger! If that isn't enough for you, hold down the pinkie button and you double the functions!
- 4 four-way switches • F16 Style Joystick
- Ability to work to operate as a two-button joystick in all games
- Includes Thrustware Software
- HOTAS™ Flight

F-16-FLCS
#1969995

$129

THRUSTMASTER FLIGHT CONTROL SYSTEM



Replica of the F-4 flightstick
Multi-function
IBM Compatible
#1852581

$69

THRUSTMASTER MARK II WEAPONS CONTROL SYSTEM

- User-programmable throttle and weapons functions
- Fully compatible with any current or future game
- Allows joystick programmability through joystick interface
- One year warranty
- For use with IBM and compatible PCs

#1853870

$109

WingMan™ Extreme *Joystick*

Use It Or Die!
- Four-way view switch
- Rubber-encased buttons for sure-fire accuracy
- Quick action trigger • Sculpted grip perfectly fits your hand
- Heavy, stable base for serious flying
- Seven-foot cable easily reaches your computer
- One year warranty • IBM or compatible system

#1987782

LOGITECH **$48.99**

WingMan™ *Joystick*

Fly it Meaner, Harder, Faster
- Rubber encased buttons improve firing accuracy
- Molded grip perfectly fits your hand
- Solid construction and heavy stable base
- Throttle control for better performance
- Seven-foot cable easily reaches your computer
- One year warranty
- IBM or compatible system

#1987771

LOGITECH **$29.99**

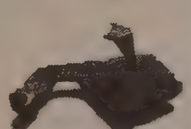
Dexxa Joystick

Advanced features at an affordable price make Dexxa Joystick your best gaming value. Wrap your hand around the ergonomic grip of Joystick and you'll feel the difference.
- The trigger uses technology from professional sports guns for better accuracy and stability
- Additional button for missiles, bombs, and other weapons control
- The autofire feature can be set for continuous fire power
- Trim adjust feature resets the cursor to the center of your screen.

#1937927

LOGITECH **$16.99**

GRAVIS Phoenix



Features Include:
- 24 Programmable buttons
- Analog or digital rudder and throttle control
- Jet style joystick handle for aileron and elevator controls
- Graphical user interface
- Includes pre-configured control settings for the most popular flight games
- Compatible with all flight programs

#1960815

$99

CH products FlightStick #1 SELLING JOYSTICK

- **ULTIMATE CONTROL:** Has total 360 degree cursor control
- **ADDED THROTTLE CONTROL ON IBM PC MODELS:** Gives you better speed control
- **DUAL AXIS TRIM CONTROLS**
- **LINEAR POTENTIOMETERS:** Rated at 4 million life cycles

#1704277

$34.99

AMIS BLASTICK FLIGHT STICK

- 2 fire buttons
- X and Y axis trim control switch
- 4' cable with 15 pin connector
- IBM Compatible

#1903267

$8.99

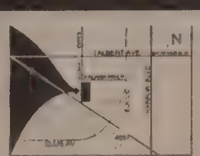
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

FRY'S ELECTRONICS

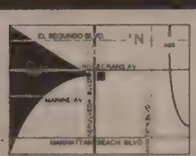
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

YOUR CD-ROM SOFTWARE BUYS ARE ALWAYS AT FRY'S!

Microsoft® ENCARTA™ '95
The Complete Interactive Multimedia Encyclopedia

Great features make it easy to use.
- Quick reference • Find wizard • On screen navigation tips
- 26000 fully updated articles • 8 hours of sound • 7000 photos
- 100 animations/video clips.

$79.95

IBM CD-ROM
#1966785

Broderbund MYST PC CD-ROM

Myst is an adventure game unlike any other, with stunning 3-D photo realistic worlds. Myst is a surrealistic exploration, where every vibrant rock, scrap of paper and sound may hold vital clues to your unraveling a chilling tale of intrigue and deceit.

$49.95

IBM CD-ROM
#1893399

ORIGIN We create worlds. WING COMMANDER 3: HEART OF THE TIGER

Is the first true interactive movie for your home PC. Features:
- Fifty intense missions each with photo-realistic, 3D space combat
- Full 16-bit digital view, 3D navigation system, stealth technology
- Play directly from CD
- Over 3 hours of live-action video plus dozens of hours of gameplay.

$54.95

IBM CD-ROM
#1969456

Spectrum HoloByte FALCON GOLD

Falcon Gold is a collection of the award-winning Falcon® 3.0, Operation: Fighting TigerTM, Hornet: Naval Strike FighterTM, MiG-29TM and Art of the Kill on CD-ROM. New, improved flight models for even more exciting combat. Multi-player modem, direct connect or network play.

$59.95

IBM CD-ROM
#1945364

Links Solid Gold Edition

Play totally realistic, 256 color golf with incredible 3D contured courses, accurate physics of flight and impact of the golf ball. Seven courses to choose from:
- Bay Hill • Barton Creek
- Bountiful • Dorado Beach
- Firestone • Troon North
- Torrey Pines

$16.95

IBM CD-ROM
#1966486

LASER MAGIC

DOOM Companion Edition
3D Virtual Reality Combat Game

It includes maps of every level. Hints and cheat codes. Sound editors and game recordings. Plus Episode 1. Recommended for mature ages 17+.

$12.95

IBM CD-ROM
#1966453

X-WING Collector Edition

The complete X-Wing Collection combines all three most popular space simulation games- X-Wings, Imperial Pursuit, and B-Wing in one CD-ROM Disk. New and enhanced feature:
- Six brand-new missions • Improved 3D graphics.
- Voice and upgraded sound

$49.95

IBM CD-ROM
#1978964

The Learning Company Reader Rabbits Reading Journey

combines interactive technology with a proven reading curriculum to deliver a software program that allows children to become successful readers. Includes:
- 40 simple reading books
- over 100 playful phonics activities
- 40 printed storybooks.

$79.95

WIN/MAC CD-ROM
#1970221

Microsoft® Ancient Lands CD-ROM

will help you to discover through rich images, sound, animation, and video, the mysteries and marvels of life in ancient times.

$44.95

IBM CD-ROM
#1923942

COREL GALLERY CD-ROM

Add flair to your word processing and presentations with over 10,000 clip art images. Includes visual clip art manager; the simplest way to view and choose your clip art.

$35.95

IBM CD-ROM
#1908516

SIERRA King's Quest VII: The Princeless Bride

The Seventh and most exciting chapter in one of the best computer game series. Created by author Roberta Williams with breathtaking animation. Fully orchestrated with over 100 melodies. Plunge headlong into a legendary tale of magic and enchantment your whole family will love.

$54.95

IBM CD-ROM
#1967845

Broderbund THE PRINT SHOP DELUXE CD-ENSEMBLE

Create stunning greeting cards, envelopes, certificates, calendars, banners, business cards, and more. Five great products on one CD.

$79.95

IBM CD-ROM
#1952836

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

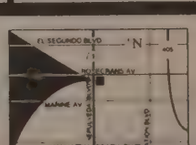
ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

DISCOVER NOVUS
VISA
MasterCard

YOUR BEST SOFTWARE BUYS ARE ALWAYS AT FRY'S!

Microsoft® Windows™ 3.11 Operating System for MS-DOS®

The Microsoft Windows operating system enhances MS-DOS to make your PC easier to use. Discover the point-and-click simplicity of Windows! Create terrific output with applications for MS-DOS. Join the millions of users worldwide who have made Windows their standard operating system!

$89.95

IBM
#1890341

Intuit Quicken 4.0 DELUXE for Windows™

The best-selling financial software just got better. Quick and easy in organizing your finances, loans, investments, budgeting and planning.

$59.95

IBM
#1955909

COMMUNICATIONS SUITE V2.1

Powerful Fax and Communications Software that Work Together

Now you can get the world's best-selling fax software together with a powerful and easy to use communications application in one affordable package: Delrina Communications SuiteTM. Together, Delrina WinFax PROTM 4.0 and Delrina WinComm PROTM set a new standard for ease of use and integration.

DELRINA **$124.95**

IBM
#1964912

Microsoft® Office Access 2.0 for Windows™

Microsoft® Access relational database management system is as easy to use as it is flexible and powerful. The visual approach to managing, financing, presenting, and sharing data lets you work the way you want. Right away. And that makes Microsoft® Access the database that is hardworking without the hard work.

$279.95

WIN
#1912074

NOVELL PERFECT OFFICE Upgrade for Windows™

The Perfectly integrated Office Suite, Now with new and improved features:

- WordPerfect 6.1 • Quattro Pro 6.0
- Presentations 3.0 • InfoCentral 1.1
- Envoy 1.0 Electronic document Publisher
- GroupWise 4.1 integrated E-Mail, Calendar, and Scheduling.

$169.95

IBM
#1982938

TouchStone WinCheck✓It 2.0

is the all-in-one Windows™ Problem Solver. Features include:

- Trouble shoot PC problems
- Clean up disk space
- Resolve set-up conflicts
- Free up Windows™ memory • Analyze system performance

Includes Uninstall Utility!

$44.95

IBM
#1948275

Intuit QuickBooks For Windows™

Quickbooks is the easiest and fastest way to organize your business. Features:

- No accounting knowledge needed
- Works like Quicken
- Tracks your whole business

$99.95

IBM
#1966981

SYMANTEC. ACT! 2.0 for Windows™

Is an easy-to-use personal information manger that gives you instant information. Look up names, addresses, and phone numbers in seconds, and it comes with a featured word processor and report generator.

$179.95

IBM
#1897452

Lotus Organizer 2.0 for Windows™

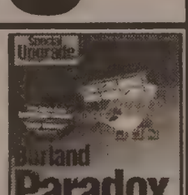
Over 100 new features to boost your productivity and simplify your life!

Lotus Organizer 2.0 integrates an on-screen Calendar, To-Do List, Planner, Address Book, Call Manager, Notepad, and Anniversary Reminder, along with group scheduling via Lotus Notes and ccMail.

$99.95

IBM
#1984284

BORLAND Paradox 5.0 Upgrade for Windows™



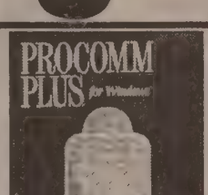
Relational database power made easy.

Now, the best Windows database is even better. Easier to use, with powerful new features, greatly increased speed, and improved connectivity. No other Windows database makes it so easy, or gives you this much power.

$129.95

IBM
#1937422

PROCOMM PLUS for Windows™

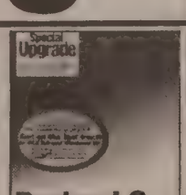


The most powerful, most easy to use communication software that speaks your language.

$139.95

IBM
#1932346

BORLAND C++ 4.5 CD-ROM



The ultimate C and C++ development suite. Combines full Borland C++ 4.5 with local and SQL database access for dBase, Paradox, PowerBuilder, Oracle, Sybase, and more.

$359.95

IBM CD-ROM
#1978078

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

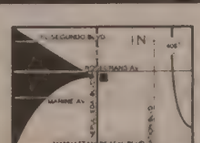
Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8am - 9pm
SATURDAY
9am - 8pm
SUNDAY
9am - 7pm

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

MASTERCARD, VISA AND DISCOVER ACCEPTED

COMPUTER BOOKS

UPGRADING & FIXING PCs FOR DUMMIES

Upgrading and Fixing PCs For Dummies shows you the cheap and painless way to revive and recharge your old, tired PC in a jiffy! Chock-full of clear, concise, and easy-to-follow instructions, this hands-on guide will help you install the hardware you need and fix nagging problems lurking in your PC.

$14.95

#1838846

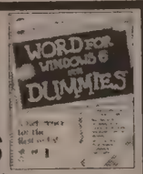
MULTIMEDIA & CD-ROMs FOR DUMMIES

The fun and easy way to learn about Multimedia.

$14.95

#1942224

WORD FOR WINDOWS™ 6 FOR DUMMIES

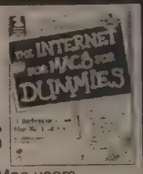


Your first aid kit for formatting text and creating great looking documents. Explains, in plain English, what to do when bad things happen.

$12.95

#1940912

THE INTERNET FOR MACs FOR DUMMIES



This reference book shows Mac users how to point, click, and surf the Internet with ease! Learn where to go and what to do once you get connected.

$14.95

#1959833

DOS For Dummies Second Edition #1851649 — **$12.95**

DOS Commands For Dummies #1822571 — **$6.95**

Windows™ 3.1 For Dummies #1942280 — **$12.95**

Windows™ 3.1 For Dummies Quick Reference Second Edition #1954621 — **$6.95**

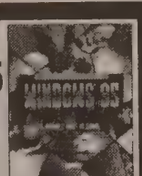
Internet For Dummies #1982905 — **$14.95**

Internet For Dummies Quick Reference #1941728 — **$6.95**

Mac System 7.x For Dummies #1959899 — **$14.95**

Excel For Dummies Mac #1959637 — **$14.95**

INSIDE WINDOWS™ 95

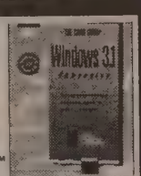


Inside Windows™ 95 goes behind the scenes to tell the story of the development of this breakthrough technology. Author Adrian King is a former director of systems software products for Microsoft®. And in this book he reveals the inner workings of Windows™ 95 with a unique, objective perspective on its design and implementation. You'll understand how Windows™ 95 will change the future of computing and why Windows™ 95 works the way it does.

$18.95

#1959774

WINDOWS™ 3.1 COMPANION SECOND EDITION



Here is the book of choice for more than 100,000 beginning to intermediate users of the Windows™ operating system-now completely updated to cover the important new features of version 3.1. Written with the Cobb Group's trademark clarity and easy-to-read style, Windowss 3.1 Companion contains detailed information on all features of the Windows operating system-plus a wealth of tips and tricks.

$20.95

#1703427

MICROSOFT® EXCEL DEVELOPER'S KIT

Documentation and Code Samples for:

- The Microsoft Excel Application Programming Interface (API)
- Microsoft Excel File Formats
- DLLs for Visual Basic®, Applications Edition
- OLE Automation
- And More!

$37.95

#1942202

MICROSOFT® WORKS 3 FOR APPLE® MACINTOSH® THIRD EDITION

Here's the fast and easy way to get up to speed using Microsoft's award-winning integrated software for the Apple Macintosh. It's the perfect home office and small business companion! In no time at all you'll be using the word processing, database, spreadsheet, graphics and communications productivity tools in Works to accomplish everyday computing tasks.

$18.95

#1703151

Code Complete Handbook #1809066 — **$26.95**

Writing Solid Code #1803196 — **$18.95**

Concise Guide to Microsoft® Windows™ 3.1 #1702781 — **$9.95**

Microsoft® Word 6 For Windows™ Resource #1936889 — **$29.95**

Microsoft® Powerpoint Step-By-Step #1940680 — **$21.95**

Microsoft® Visual C++ Run Time #1793169 — **$25.95**

Running Microsoft® Works For Windows™ #1879481 — **$18.95**

Inside Ole 2 Developer's Guide #1936683 — **$37.95**

TIE FIGHTER: THE OFFICIAL STRATEGY GUIDE

Tie Fighter: the sequel to Lucas Arts' wildly successful X-Wing, is based on the classic Star Wars series. In this game, the player is a cocky, young Imperial Navy Academy cadet who must first train and then go into action against the deadly Rebel Alliance fighters.

$14.95

#1946354

MYST: THE OFFICIAL STRATEGY GUIDE

The Official Strategy Guide is the ultimate, authoritative source of answers and information about Myst Island and the Ages of Myst. Inside players will find a complete, fictionalized walkthrough of the game; detailed examination of the puzzles and the reasoning behind them; screen images of the most important locations; and overhead views of Myst Island and the Ages.

$14.95

#1872004

DOOM II SURVIVAL GUIDE

Inside the Doom II Survival Guide you will find:

- Doom II maps for over 30 levels
- Critical details for all the new monsters
- Quick start survival tips
- And much more..

$8.95

#1957945

THE 7th GUEST THE OFFICIAL STRATEGY GUIDE

The 7th Guest: The Official Strategy Guide is your passport into the world of the hottest-selling CD-ROM around. Take a walk through this haunted 3D world and discover all its secrets.

$14.95

#1883525

Simcity 2000: Power, Politics & Planning #1911431 — **$14.95**

CD-ROM Games Secrets #1946103 — **$12.95**

Sid Meiers Civilization Or Rome On 640K #1696792 — **$14.95**

King's Quest Companion Third Edition #1753628 — **$14.95**

Programming Games For Beginners For Windows™ #1852248 — **$19.95**

Virtual Reality Playhouse #1719585 — **$17.95**

Flights Of Fantasy Programming #1783812 — **$24.95**

Ray Tracing Creations #1785489 — **$29.95**

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

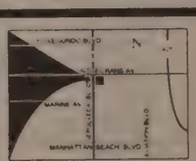
ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444

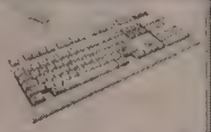


Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

Input Devices

IBM PROFESSIONAL 101-KEY KEYBOARD



- IBM PS/1, PS/2 And Compatible
- Curved Profile, User Adjustable Angle
- Positive Tactile Feedback
- Includes 6-Pin To 5-Pin Adapter
- 1-Year Warranty
- IBM 30-Day Money Back Guarantee

KB571
#1779354

$98.99

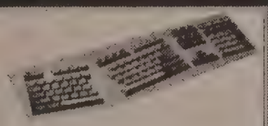
Microsoft® Natural Keyboard

- Split-key, sloped keyboard design promotes a natural wrist position
- Built-in palm rest provides a comfortable resting place for hands while not typing
- Soft, tactile key action
- Standard layout minimizes time required for adapting to split keyboard

$89.99

#1952593

Split Style ERGONOMIC KEYBOARD



- AT Compatible
- Din 5 Connector
- **Includes FREE Custom WristPad!**

#1986390

$48.99

SIIG, Inc. WAVETOUCH 101 TACTILE FEEL KEYBOARD

Durable 10,000,000 keystrokes • Comfortable - unique wave shape makes typing easier • Versatile Compatibility - AT/XT auto-detect (no switch) • Industry Standard - 101-key enhanced keyboard layout (QWERTY) • Dual-height adjustment for typing comfort
Num Lock, Caps Lock and Scroll lock LED indicators • 6' coiled coil

#1875041

$38.99

FIRST™ TRACKBALL

The Space Saving Mouse Alternative

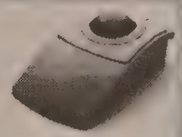
You'll be impressed with the precision, speed and space saving features of First Trackball. It comes with MouseWare™ Lite software

#1937880

LOGITECH

$44.99

MICROSPEED TRACKBALL

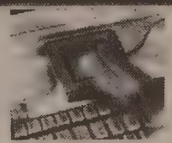


- 50 to 1000 dpi Resolution
- Includes Adapter
- Serial Version
- Palm Size Trackball

#1285034

$68.99

GLIDEPOINT TrackPad



The World's Newest Pointing Device is Operated by the World's Oldest.

It's an easy-to-use, high resolution touch surface that instantly puts a powerful pointing device in the tip of your finger, making using your portable more comfortable, intuitive, and productive.

#1960804

$74.99

KENSINGTON. THINKING MOUSE 4-BUTTON PROGRAMMABLE MOUSE

Spend less time clicking and more time working.
Double-click with just one click. Lock a button down with just one click. Print a document, save a file, enter a block of text- all with just one click of the mouse. Kensington's easy-to-use programmable mouse software saves time, reduces hand movements, and eliminates many repetitive tasks. Serial and PS/2 Version for PCs and compatibles.

#1981410

$78.99

Microsoft® HOME MOUSE

Make friends with the colorful new Microsoft Home Mouse! Comfortable, easy, and just plain fun to use. It's a perfect fit for everyone using your home computer. Contains new Microsoft IntelliPoint software Home Edition.

#1969973

$39.99

LOGITECH MOUSE

2 Button • 400dpi • Serial
Dos and Windows Drivers
#1882502

LOGITECH

$14.99

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

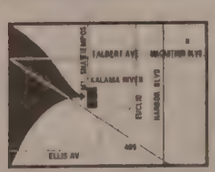
Fry's ELECTRONICS

Prices Good Through February 28, 1995

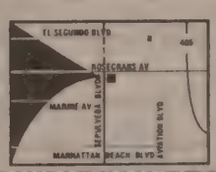
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers



FOUNTAIN VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

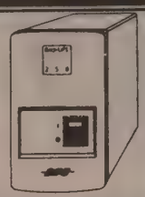


MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

SURGE PROTECTION

DETER DATA DISASTER
BACK UPS 250
UNITERUPTABLE POWER SUPPLY



- Modified Sine wave output safer for all equipment types than square wave
- 250 Volt/AMP Backup Power Supply
- 2-Outlet
- EMI/RFI filtering
- 10 Minutes Back-Up at 250VA

APC AMERICAN POWER CONVERSION

$109.99

#1651164

POWER BACKER PLUS

300VAUPS protects against surges, brownouts, and blackouts. Protect Your Data!

KENSINGTON.

$89

#1976478

POWER CENTER
W/FAX MODEM PROTECTION

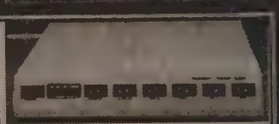
- Power up entire system with master switch or control each component individually
- Telephone line suppression provides protection to fax and modem
- RFI/EMI Filtering reduces static
- Organizes cords out of the way

MEMOREX COMPUTER SUPPLIES

$26.99

#1896772

POWER CENTER WITH FAX AND SURGE PROTECTION



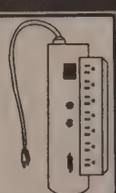
- 5-outlet surge protector
- 5 individually lighted controls
- Lighted master on/off switch

Interex® Computer Products

$17.49

#1976456

7-OUTLET SURGE ARREST



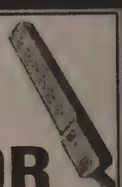
- 240 Joules Dissipation
- Site fault wiring indicator
- Reduce Intermittent Lock Ups and Parity Errors with EMI/RFI Filtering

APC AMERICAN POWER CONVERSION

$18.99

#1651256

POWERTREE 10 6-OUTLET SURGE PROTECTOR



- Suppresses Surges up to 120 Joules
- 15 AMP Circuit Breaker
- PlatinumColor
- 6-outlets

KENSINGTON.

$12.99

#1423578

AVOID SYSTEM MELTDOWN
6-OUTLET SURGE PROTECTOR

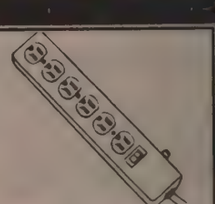
- PM6SP2
- 140 Joules
- Noise Filtering
- Five Year Warranty

WABER, INC.
A Subsidiary of SL Industries, Inc.

$6.49

#1840885

6-OUTLET BASIC SURGE PROTECTOR



Clamping ResponseTime <1 Nanosecond
Energy Dissipation 60 Joules

$1.49*

*After $3 Mail-In Rebate In-Store Price $4.49

#1619399

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

ELECTRONICS Fry's

Prices Good Through February 28, 1995

Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Corporate PO Fax Numbers

FOUNDATION VALLEY
10800 Kalama River Ave.
(714) 378-4400
(714) 378-4444

MANHATTAN BEACH
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
(310) 364-3700

DISCOVER NOVUS
VISA
MasterCard
ACCEPTED

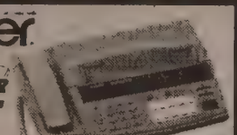
We're at your side.

brother®

THE WORLD'S BEST FAX MACHINES

THE WORLDS BEST FAX MACHINES

brother
THERMA PLUS PAPER



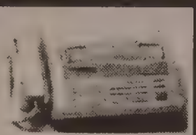
FAX MACHINE
WITH PAPER CUTTER

Brother's breakthrough fax machine incorporates newly developed therma plus technology which uses fax paper that feels like plain paper and reduces print fading (lasts 3 times longer than thermal paper under normal filing conditions, and you can even use a highlighter!). Other features include, 10 page document feeder, 15 station memory, 16 level grey scale, activity report, polling and much more for only...

$269

Model FAX-620
#1896510

brother
THERMA PLUS PAPER



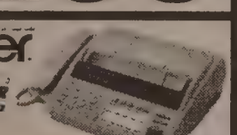
FAX MACHINE
WITH 256K MEMORY, OUT OF PAPER RECEPTION & BROADCASTING

If your looking for a fax machine for your home office or workplace, look no further than this premium valued fax machine from Brother that incorporates 256K memory for Out-of-Paper Reception and Sequential broadcasting with Auto Paper Cutter, 60 Station Memory, 32 Level Gray Scale, 16 Digit LCD Display, 15 Page Document Feeder, Therma Plus paper capacity, an Anti-Curl System, Super Quick-Scan, Alphabetic Telephone Index, and much more! An excellent value at only...

$299

Model FAX-740
#1985218

brother
THERMA PLUS PAPER



FAX MACHINE
WITH 1MB MESSAGE CENTER & PC LINK CAPABLE

Brothers revolutionary fax machine offers a digital message center for either18 minutes of recording, up to 50 page of memory for out of paper reception, or you can configure the storage memory to be usedon a first come first serve basis. The optional missing link will allow this fax machine to act as a PC/fax modem, a scanner, and a printer! Other feature include anti-curl system, uses ThermaPlus paper, quick-scan, 164' paper roll capacity, 15 page document feeder, auto cutter, sequential broadcasting, and 60 number memory just to name a few.Now only...

$399

Model FAX-820
#1925195

brother

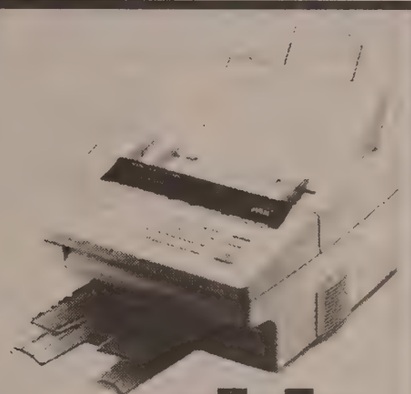
PLAIN PAPER FAX
WITH 256K MEMORY

Brother's done it again! Last year Brother broke the $400 price barrier in paper cutter Fax, and for an encore, Brother has destroyed the $799 stand alone plain paper Fax barrier with this unbelieveable value. Its 200 sheet paper cassette, 30 page auto document feeder, on-screen programming, "smoothing" enhanced image resolution, 48 digit LCD display, multiple resolution transmission, 32 level grayscale, 160 station memory, and Fax/Tel Switch makes this the best value you will find at only.....

$549

Model FAX-980
#1801828

brother
We're at your side.



PLAIN PAPER LASER FAX AND COPY SYSTEM
WITH PC LINK CAPABILITY

missing link

Brothers state-of-the-art Laser fax machine combines laser print quality with copier capabilities of up to 99 continuous copies along with reduction and enlargement capabilities, and PC Link capability enabling you to utilize the laser fax machine as either a Scanner, PC/Fax Modem, or a printer! Other features include 256k memory for out of paper reception or sequential broadcasting, 30 page document feeder, 200 page sheet paper tray, 140 station memory, 32 level gray scale, and much much more! The best home office investment you will ever make at just...

$799

Model PPF-2500
#1925173

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

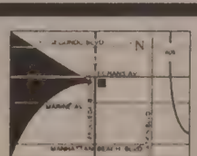
Fry's ELECTRONICS

Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



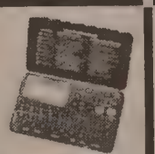
Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

GET ORGANIZED AT FRY'S ELECTRONICS

ORGANIZERS

SHARP 34K PERSONAL ORGANIZER



Perfect for the business person on-the-go, this compact data bank incorporates a 14 x 3 line display, built-in calendar, schedule, phone /memo, memo pad, expense, clock, anniversary, and calendar functions as well as QWERTY keyboard to simplify data entry. Once you've used this electronic marvel, you won't leave your home or office without it.

$49.95

Model YO-110
#1741472

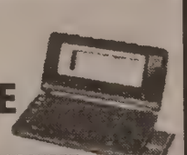
SHARP 128K ELECTRONIC ORGANIZER

The Sharp YO-370 is a pocket sized, personal information and time management tool that allows you to link it to a PC (with optional accessory). Keep a log of all upcoming projects and sort your list by priority. Track your business and personal expenses and summarize them by day or between days. It also stores birthdays, anniversaries and holidays and provides advance warning for these important events. Stores 1,680 names and numbers or 1,040 schedule appointments (128K) all for the low price.

$118.95

Model YO-370
#1955367

CASIO 256K EXECUTIVE B.O.S.S.
WITH BUILT-IN SPREADSHEET



Casio's latest business organizer comes equipped with a business card management function, schedule function, two month calendar display, world time, a daily alarm , schedule alarm, telephone directory, memo functions, reminder function, to do list, cut & paste function, and spreadsheet function (compatible with Lotus 1-2-3 data) all displayed on a wide 40 character by 10 line screen. An invaluable investment at only

$259.99

Model SF-R20
#1728473

PALMTOP COMPUTERS

PSION SERIES 3
POCKET SIZED 512K COMPUTER
WITH BUILT-IN SPREADSHEETS

Psion has redefined the state of the art in hand held computers with the new Series 3. It may be small, but this pocket-sized programmable computer comes equippedwith features found in desktop machines plus powerful built-in software, including a full specification word processor and outliner that's compatible with Microsoft word. When using the Series 3 you will quickly learn from the system of graphic displays and option list how easy the Series 3 is to use. And with Psion's unique Multitasking Operating System, as many of the facilities as you want can be used at the same time! Other features include an automatic phone dialer, world information, a time and personal management file, powerful graphics programming language (OPL/w) which will enable you to write your own applications and two expansion ports for plug in SSD devices for unlimited memory and software.

$399

Model SERIES 3A
#1843567

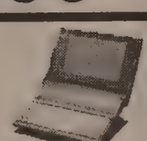
HEWLETT PACKARD Authorized Dealer
1MB PALMTOP COMPUTER
WITH 80x25 FULL SCREEN
MS-DOS 5.0 & BUILT-IN POCKET QUICKEN

The smallest, lightest HP PC ever comes equipped with complete organizer software to manage your time, tasks and data, plus you can retrieve information instantly with a full range of built-in personal productivity tools. The pull-down menus and dialogue boxes make it simple to master the familiar commands, and the high-resolution display with zoom option is easy to read ! With Lotus 1-2-3 built-in you will have full spreadsheet capability, including graphics and macros. Also includes CC:Mail built-in. Now only...

$498.99

Model HP-200LX
#1941670

OMRON 1.9 lbs. SUB-NOTEBOOK
RUNS ON 4 AA BATTERIES UP TO 10 HOURS



2MB RAM • 2MB ROM • 2 PC MCIA Type II Slots Fax/Modem Built-In • Serial/Parallel • 640 X 400 Resolution Preloaded Software: DR DOS • Bitfax LapLink XL • BitCom DataSel Gold • Contact Manager.
AA batteries not included By OMRON.

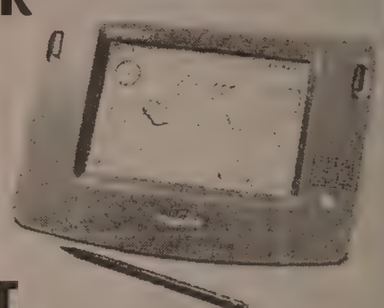
$599

Model TOUCAN
#1809653

PERSONAL COMMUNICATORS

SONY.

Magic Link



PERSONAL INTELLIGENT COMMUNICATOR

A revolutionary concept in electronics which integrates the most useful features of personal computers, telephones and pagers in a handheld, portable unit. By incorporating Magic Cap™ communicating applications platform and Telescript™ technology, the Magic Link™ Communicator represents a leap forward in the use of technology to enhance your lifestyle. Features include integrated Fax/Data Modem built-in mic/speaker, Pocket Quicken, PenCell Spreadsheet, Spell Finder, Datebook, Notebook, Calculator, File Cabinet, mind game software, and much more. Magic Link™ will also facilitate various modes of communication including Phone, E-mail, Fax, Pager and Infrared, as well as supporting AT&T PersonaLink℠ Services and America Online service.

$899

Model PIC-1000
#1959305

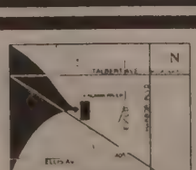
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

FRY'S ELECTRONICS

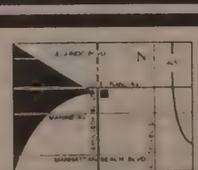
Prices Good Through February 28, 1995

Limit Rights Reserved Not responsible for typographical errors

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

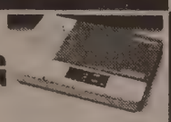
DISCOVER NOVUS
VISA
MasterCard

DISCOVER, VISA AND MASTERCARD ACCEPTED

YOUR BEST PANASONIC HOME OFFICE BUYS ARE ALWAYS AT FRY'S

ANSWERING MACHINES

Panasonic ANSWERING MACHINE

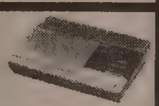


Answering System with Auto-Logic Operation, Tone Remote Control, Digital Display, Message Memo Recording and remote turn on. Auto-Logic Operation automatically rewinds, plays messages, stops at the last message and resets itself at the touch of one button.

$39.99

Model KX-T1000
#1498194

Panasonic DUAL MICRO CASSETTE ANSWERING SYSTEM

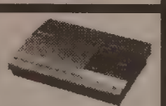


Panasonic's new dual micro cassette answering system offers an LCD Call Counter, marker message, room monitor, auto disconnect, electronic auto disconnect, electronic volume control, audible message alert, and much more for only...

$69.95

Model KX-T2100
#1740208

Panasonic DUAL MICRO CASSETTE ANSWERING SYSTEM
WITH VOICE TIME/DAY STAMP

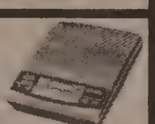


Panasonic's new dual micro cassette answering system offers an LCD Call Counter, marker message, room monitor, auto disconnect electronic auto disconnect, electronic volume control, audible message alert, and much more for only...

$89.95

Model KX-T2300
#1740219

Panasonic TWO LINE ANSWERING MACHINE
WITH VOICE TIME/DAY STAMP



Perfect for the home or office, this Panasonic two line answering machine offers voice time/day stamp, voice prompts, 2 variable greeting messages, room monitoring, message alert, call screening, auto interrupt, toll saver, and more. Now just...

$129.95

Model KX-T5300
#1768084

BUSINESS PHONES

Panasonic SPEAKERPHONE

For the office or home, this phone has all the features you need. It has a speaker phone, 28 station automatic dialer, automatic redial and much more.

$49.95

Model KX-T2315
#1530100

Panasonic TWO LINE SPEAKERPHONE

A perfect compliment to your home or office, this two-line speakerphone comes equipped with 3-way conferencing, 20 number programmability, seperate ring switches for each line, and a local mode function. Now only...

$69.95

Model KX-T3120
#1510676

Panasonic 2-LINE SPEAKERPHONE
WITH LCD DISPLAY

From Panasonic comes this fully featured 2-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

$89.95

Model KX-T3175
#1745122

Panasonic THREE LINE SPEAKERPHONE
WITH LCD DISPLAY

From Panasonic comes this fully featured 3-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 48-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

$169.95

Model KX-T3185
#1768039

10 CHANNEL CORDLESS PHONES

Panasonic 10 CHANNEL CORDLESS PHONE

Most cordless phones have a very short battery life, but this one can last up to 10 days in the standby mode! Add a flexible antenna, 10 number memory, 10 channels, paging and you have an excellent value at...

$69.99

Model KX-T3712BK
#1916654

Panasonic 10 CHANNEL CORDLESS PHONE
WITH QUICK CHARGE & SECURE GUARD SYSTEM

Panasonic has developed the latest in cordless technology by incorporating a Quick Charge system that will enable you to recharge its battery in one hour providing 7-day standby or 3 hours providing 21-day standby! The Secure guard system can help keep your conversations private and help prevent eavesdropping scanners or baby monitors. Other features include one paging, 10 number memory, last number redial, flash, auto security code settings and much more for only...

$118.95

Model KX-T3940
#1820915

Panasonic 10 CHANNEL AUTOSCAN CORDLESS DUAL KEYPAD SPEAKERPHONE
WITH SECURE GUARD VOICE SCRAMBLING

Panasonic's comes equipped with secure guard which scrambles your voice when others try to listen in on your conversations with other cordless phones, radios or even scanners! Other features include quick charge technology enabling to fully charge the battery in only 3 hours for 21 day standby, 2-way paging, intercom, 10 number memory, high gain antenna, and much more. All for only...

$159.95

Model KX-T3965
#1886160

Panasonic 10 CHANNEL CORDLESS SPEAKERPHONE
WITH DUAL MICROCASSETTE

This top of the line cordless dual microcassette answering system with sound charger technology delivers sound so clear, you will hardly believe your ears! Some of the features included are: 2-way paging, intercom, auto security system, message alert, 2-way and memo recording just to name a few. Now only

$199.95

Model KX-T4400
#1802450

FAX MACHINES

Panasonic FAX MACHINE
WITH PAPER CUTTER, SPEAKERPHONE AND ALL DIGITAL ANSWERING MACHINE

Panasonic line of fully featured fax machines start with this compact model which includes 64 level grayscale, super thermal paper compatible, paper curl reduction, 164' paper roll capacity, 15 page document feeder, distinctive ring, delayed transmission, paper save mode, telephone directory with alpha-search, 12 station one-touch with 28 station speed dialing, and much more. All for just...

$349

Model KX-F750
#1944282

Panasonic PLAIN PAPER FAX MACHINE
WITH 20 PAGE MEMORY

The ultimate plain paper fax from Panasonic features a jumbo LCD display, 70 page paper cassette, adjustable letter/legal tray, 32 level halftones, polling, activity reporting, 20 page document feeder, broadcasting to 128 locations, fax transfer, enlargement and reduction copier functions, fax/tel switch, 28-station one-touch dialer, 100-station speed dialer, telephone directory with alpha-search, and much more! Now just.....

$799

Model KX-F3000
#1850626

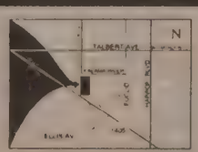
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

ELECTRONICS Fry's

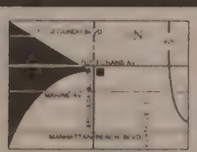
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER
VISA
MasterCard

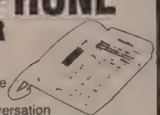
DISCOVER, VISA AND MASTERCARD ACCEPTED

THINK FRY'S FIRST
FOR HOME OFFICE
SERVICE, SELECTION & SAVINGS

SPEAKERPHONES

BELL Phones BY NORTHWESTERN BELL PHONES

SPEAKERPHONE WITH 13 NUMBER MEMORY



The convenience of a handsfree speakerphone allows you to do other tasks while having a conversation on the phone. Features include 13 number memory, auto redial, mute, flash, and more. An excellent addition to any home or office at only...

$19.99

Model 4350
#1917518

SONY. SPEAKERPHONE WITH 32 NUMBER MEMORY

From the leader in cordless phone technology comes a new line of feature phones. This unit has a crystal clear speakerphone, 32 number memory and more!

$49.95

Model IT-D100
#1516878

Panasonic LCD READOUT SPEAKERPHONE

This outstanding value from Panasonic offers a 12-digit LCD readout for phone number, clock, call timer(minutes & seconds), and operating modes. Perfect for the home or office at only...

$69.95

Model KX-T2365
#163665

SONY. TWO LINE FEATURE PHONE WITH SPEAKERPHONE

Phones with 2-line operation are relatively common, but this phone offers a distinctive ring for each line! The LCD indicator will tell you the number dialed and the time. Now only..

$79.95

Model IT-D250
#1516904

MULTI-LINE PHONES

BELL Phones BY NORTHWESTERN BELL PHONES

TWO LINE PHONE

Perfect for the home office with multi-line needs, this 2-line phone from Northwestern Bell features line-in-use LEDs, 3-way conferencing, 15 number memory, hold, flash, pause, and ringer controls. An excellent value at...

$39.99

Model Easy Touch 2202
#1890905

Panasonic TWO LINE PHONE

A two line phone doesn't have to cost a fortune. Panasonic has the low cost answer for you. This unit has a convenient auto dialer, conference calling and much more!

$69.95

Model KX-T3110
#1505313

Panasonic TWO LINE SPEAKERPHONE WITH LCD DISPLAY

From Panasonic comes this fully featured 2-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only

$89.95

Model KX-T3175
#1745122

AT&T THREE LINE SPEAKERPHONE

AT&T's multi-functional centrex compatible 3-line speaker -phone comes equipped with page, intercom, 3-way conference, LCD display, 40 number memory, auto line selection, hold, do not disturb function, auto-redial, mute, program-mable pause, call transfer, flash, seperate ringer controls, and more, all for only....

$179.95

Model 843
#1853892

ALL DIGITAL ANSWERING MACHINES

AT&T

ALL DIGITAL ANSWERING MACHINE

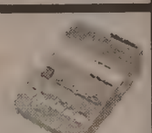
This AT&T answering system utilizes tapeless digital technology to ensure consistent recording quality over the life of the system. The convenience of new message play-back, outgoing message bypass, remote system turn on or off and remote message recording makes this an excellent value at only...

$59.95

Model 1710
#1853906

BELL Phones BY NORTHWESTERN BELL PHONES

ALL DIGITAL ANSWERING MACHINE WITH TIME DAY STAMP & 13 MINUTE CAPACITY



This fully featured all digital answering machine from Northwestern Bell comes equipped with Time/Day Stamp, Programmable Security, Selective Skip or Erase, Call Screen, Extension Pickup, Auto Disconnect, Multiple Memo Record, Toll Saver, VOX, 13-Minute Capacity, Remote Access, and much more! An incredible value at just...

$49.99

Model 700
#1964820

GENERAL ELECTRIC

ALL DIGITAL ANSWERING MACHINE WITH THREE MAIL BOXES

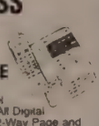
With three mailboxes to choose from, members of the household can have messages stored for them in their own mailbox! The all digital capability eliminates the need for moving parts and allows for instant playback of incoming messages-no need to wait for a tape to rewind or fast forward! Other features include voice time/day stamp, two outgoing messages, digital counter, selective message erase and much more for only...

$79.95

Model 2-9876
#1839261

AT&T

10 CHANNEL CORDLESS SPEAKERPHONE WITH 26 MINUTE CAPACITY & ALL DIGITAL ANSWERING MACHINE



From AT&T the leaders in telecommunication technology comes this state-of-the-art 10 channel cordless speakerphone with 26 minute capacity All Digital Answering Machine. With features that include 2-Way Page and Intercom, Hold, Last Number Redial, Time/Day Stamp, Multiple Outgoing Announcements, Voice Prompts, Digital LED Message Display, Call Intercept, Call Screening, and much more, AT&T has developed an invaluable addition to any home or office for ju

$219.95

Model 5650 #1919543

900 MHz CORDLESS PHONES

uniden 40 CHANNEL 900MHz CORDLESS PHONE

Uniden's latest 900MHz cordless phone gives you unparalleled range and performance along with premium features that include 40 channel selection, call monitor, 2-way/hands-free intercom, 10 number memory, mute, last number redial, flash, and much more, all for just....

$189.95

Model EXP-901
#1965005

GENERAL ELECTRIC

100 CHANNEL AUTO SCAN 900 MHz CORDLESS PHONE

By combining 100 channel auto scan (which allows the phone to lock-on-to the channel that is getting the clearest signal) and 900 MHz crystal clear technology (for improved clarity and extended range), GE has developed the ultimate cordless phone! Other features include 10 number memory, page/find from base to handset, handset volume control, distinctive ring, and more. An excellent value at....

$189.95

Model 2-9910
#1923425

AT&T

DIGITAL 900MHz DUAL KEYPAD CORDLESS SPEAKERPHONE

AT&T, the leader in digital telephone technology once again leads the way into the future with the introduction of this 900MHz cordless phone. By operating at the 900 MHz frequency range rather than the conventional 46 to 49 MHz range, this AT&T cordless phone will provide clearer transmission with less noise and interference from other electronic devices, as well as extended range performance! Features include 10 number memory, mute, hold, flash, last number redial, one-way paging, out-of-range indicator, digital voice encryption, and much more for only

$249.95

Model 9120
#1853261

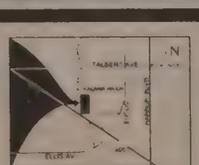
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

FRY'S ELECTRONICS

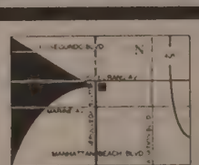
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

EXPERIENCE THE REVOLUTION OF

DIGITAL TV

- LASER DISC QUALITY VIDEO
- CD QUALITY DIGITAL AUDIO
- OVER 150 CHANNELS OF ENTERTAINMENT

RCA

DSS™ DIGITAL SATELLITE SYSTEM

HURRY, SUPPLIES ARE VERY LIMITED!!!

DIRECTV

JUST A SAMPLE OF WHAT'S AVAILABLE!

Discovery, ESPN, C-SPAN, Cartoon Network, TRIO, TNT, CNN, CNBC, The Disney Channel, COURT TV, USA Network, CNN, TBS, TRAVEL, MIRAMAX, UNIVERSAL, TRISTAR PICTURES, C-SPAN2, Walt Disney Pictures

USSB

Multi Channel HBO, MTV, SHOWTIME, SHOWTIME 2, VH1, THE MOVIE CHANNEL, Multi Channel CINEMAX, THE COMEDY CHANNEL, ALL NEWS, LIFETIME, FLIX, NICK NITE

USSB OFFERS

- 5 HBO CHANNELS
- 3 SHOWTIME CHANNELS
- 2 "THE MOVIE" CHANNELS
- 3 CINEMAX CHANNELS
- AND MORE

RCA

DIGITAL SATELLITE SYSTEM (DSS) DISH AND RECEIVER

Enjoy over 150 channels of top-notch entertainment with the crystal, digital clarity of the new RCA DSS system. CD quality sound and over 400 lines of video resolution, provide an incredible entertainment experience. Let Fry's and RCA help you drive on the Information Superhighway!!!

LIMITED QUANTITIES

$698

MODEL DS-1120WR
#1942578

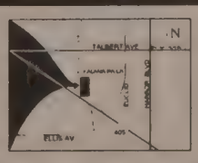
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

FRY'S ELECTRONICS

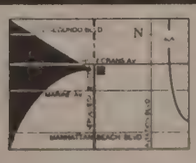
Prices Good Through February 28, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED

MULTIMEDIA 101

In This Section:

- Multimedia 101
  Yet More Adventures In The Land Of Interactive Media 152
- Amiga
  MacroSystem Development's WarpEngine 162
- Excellent Edutainment
  Great CD-ROM Titles And How They're Made 175
- Multimedia Kiosk Overcomes Designer Anxiety 180

Yet More Adventures In The Land Of Interactive Music

MediaBand Part 2,

Plus Gingerbread From The Residents

Last month we left Marc Canter explaining his goal: "I want to create a new type of technology, and that technology is multiple-user, real-time performance software." He was also in the process of forming the MediaBand to demonstrate his concepts and had just decided not to pay the band members as a test of their loyalty. Two of the four, including Todd Rundgren, left the band as a result.

In our conversation, Canter explained how he reached that point: "One of the secrets of MacroMind was that we always had someone using the tools. That created the process of iteration. So we didn't create a spec, go off and write it, and then show it to the user. Every day," he said with emphasis, "we changed the spec, a very unusual strategy by the way. So as I invented this new technology for my second company, I realized that I needed somebody to use this multiple-user, real-time performance software, and that meant a band, because they had to be a group of people. I thought, 'Gee, if I'm going to do a band, I might as well redefine the concept of a band, so let's create a media band, let's go all the way.' Right?

"And then I thought, 'Well, that's great, but who the hell cares about Marc's media band? Let's get a mythology around it.' So we created the story of four students who went to the John Cage Academy of Multimedia some time in the future. And, of course, what they did was to get together in a band—they were the four top students.

"Like any other band, they had a horrible breakup."

At this stage, Canter obviously straddles the worlds of showbiz and software as confidently as anyone and more competently than most. There's certainly some hot air here, but it's entertaining hot air.

TRUE LOVE AND TECHNOLOGY

The story continued with two of the band members becoming lovers, although Canter used a considerably more graphic description, while the other two, too shy to reveal their attraction to each other, went their own ways. One, the hero, worked as an encryption expert for TRW while the other became an anonymous animator in a Korean animation factory. One day, the hero discovered the animated, multimedia diary of the lead singer accidentally backed up on one of his own cartridges. Both the depth of her affection for him and the artistic key to producing live-performance multimedia were revealed to him. He determined to find her again and reform the band.

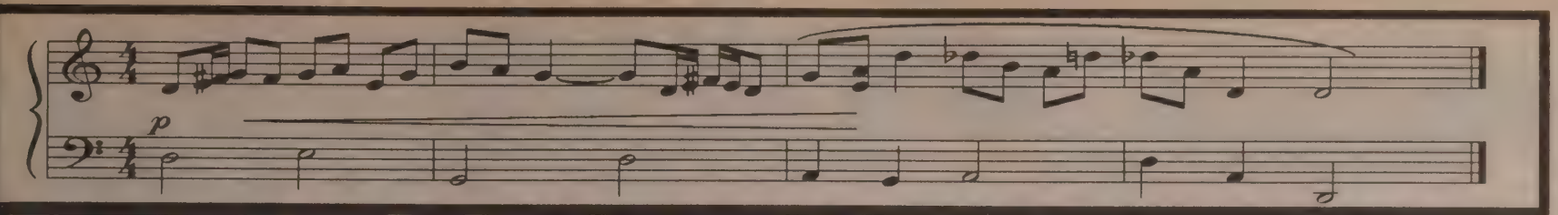
He called in all his hacker friends and together they pulled off the greatest act of unauthorized entry to systems ever. His message of love for her appeared on every single computer screen, all the world's ATMs displayed the lyrics of his love song to her, the Good Guys video wall and the Goodyear blimp both beamed the words out, they were literally everywhere including Times Square and Tokyo. The "girl" could not escape, the lovers became happily united, the band reformed—and the hero is busted by the FBI.

"That's the end of Act 1," says Canter. "It's a real screenplay and it's included on the *Meet MediaBand* CD-ROM as a text document."

THE COMPLEAT CANTER

There's more to the story, but that's the flavor of Canter's personality—rather all-encompassing,

BY JONATHAN E



Make Music with Your Computer!

NAMM

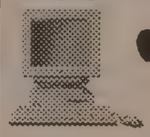
Want to see the newest products? Come by our store. Watch our NAMM show video!

SHOW VIDEO

Roland

EP7II Digital Piano
$999
E36 Intelligent Synth
$950
JV-35 Synth w/$600 acces
$989

Apple® Peavey® Music Starter System



Quadra 630 4/160sys
EZ Music Starter Kit:
Book of Midi
EZ Vision
Band in a Box
Interface
Peavey DPM2
260 Drum Patts
Installation
Training Included

$2299
Complete with Velocity, Multitimbal Keyboard

SAVE $1300!

Digidesign

SESSION 8

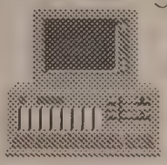
Seminar

Digidesign Rep Jerry Antonelli will be here February 2 to demo the power of Session 8, Samplecell AudioMedia II & SoundTools at 1PM & 3PM RSVP

PC

turtle beach systems

Roland



Monterey Midi System

486DX-66 CPU
1meg video
1024x768 monitor
340mgHD
keyboard
mouse
Windows 3.1
Fatar st49 key
Quad
Cakewalk Win
Installation & Training

$2599

Plays 4 Tracks of Digital Audio w/4 meg rom of Sample Sounds w/ EFX!

The Latest Products & Largest Inventory of Music Software!

- Voice to Midi Convtr $150
- Finale 3.0 Win upgrd $99
- Roland Snd Canvas DB
- Roland RAP-10 $299
- Over 100 Midi Help Books!
- Dr Synth & SCC1 Sale
- Cakewalk Home ST $99
- Band in a Box Pro $69
- PowerTracks Seq $29
- MusicTime 8 $109
- Dr. T QuickScore $59
- Midi Interfaces from $25
- Noatation Prgm from $50
- Peavey DPM 3se $1695
- Passport Producer Pro Sale
- General Midi Files from $12
- Turtle Beach Maui In Stock
- SAW 8 Track softwr $499
- Atari Falcon 030 $799
- Roland JV880 $599
- Passport Encore $399
- Quad-4 track softw $sale

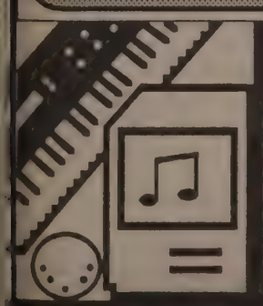
Mac/PC Session 8 In Stock

Apple PowerMac 6100-66 SALE $1599

DAT to CD MASTER $50 Call for Details

9 REASONS TO PURCHASE FROM US:

1. FREE Phone Support on Products purchased from us.
2. EZ Financing & Leases
3. Over 1000 Midi Programs!
4. Private Tutoring in your home or studio by the experts
5. FREE Monday Nite Midi Introduction Seminars
6. Notation & Sequencer Classes Performer & Vision starting Soon
7. Finale User Grp meet 4th Wed
8. Midi/Music BBS (818)789-4287
9. Computer Swapmeet in Pomona Feb 11,12



The Electronic Music Box

14947 Ventura Blvd. Sherman Oaks

(818) 789-4250

ebullient, and quite utterly without reservation.

Anyone who's heard him talk about Windows will know that he can also be scathing even while being humorous. The liner notes for *Meet MediaBand* include the question, "Who's gonna kick little Billy Gates' ass?" In our conversation, Canter forthrightly stated that his dislike is based on Gates selling "code that sucks."

Much to my surprise, a Windows version of *Meet MediaBand* will be out shortly, but Canter warned that "it's fine as long as you've got a string of garlic on, you're surrounded by salt, and you've got a large crucifix in your hand ready to stab him in the heart when he comes too close."

At this stage, Canter obviously straddles the worlds of showbiz and software as confidently as anyone and more competently than most. There's certainly some hot air here, but it's entertaining hot air. His ambitions are huge, and include such goals as producing interactive work with artists such as Janet Jackson, Billy Joel, and Third World.

Not to mention taking the MediaBand on the road with a very elaborate set (he was sketching it out at the time, it's more like a whole circus tent or an arena than a set), setting up his own label *a la* music biz, and writing an opera. You know, I wouldn't be surprised if he did them all—but it's show biz and high finance and nothing is certain except that someone's always coming up behind you.

Maybe even in the form of The Residents!

THE RESIDENTS' GINGERBREAD MAN

A couple of months after the release of *Meet MediaBand*, Ion released The Residents' second CD-ROM, *Gingerbread Man*. There are some similarities between the two, but also some substantial differences. It is also a totally different approach to interactive media from their first CD-ROM, *Freak Show*.

In some ways *Gingerbread Man* raises the ante by providing a considerably more involving and interactive experience; in other ways it's a sidestep from *Freak Show*, and possibly less involving. I almost wonder if perhaps the field of interactive music will develop so quickly that work of only a few months ago will appear hopelessly outdated. This is, of course, one of the features of a true pop music market—but considering the time and expense involved in developing CD-ROMs, and their relatively small market, it's perhaps not the best news for developers.

On the other hand, it keeps it interesting for journalists and consumers. And this is important, because frankly, although both CD-ROMs are outstanding in their field, neither really offers the continued enjoyment that an old-fashioned linear piece of music can. Nor, I would guess, do they offer the pleasure that authentic music making or playing does for a musician.

Gingerbread Man is actually a hybrid disc containing ten songs of about thirty-six minutes of Red Book audio that play in ordinary CD players and one data track for CD-ROM drives that has interactive versions of the same songs. The interactivity is technically very impressive; the disc is a must-see for those reasons.

Artistically, well.... It's only fair to say that The Residents, along with their graphics crew, did not brew my cup of tea. Not that it's without merit, it's just that I get my musical joy from other places. This is not too surprising, since The Residents' music very rarely (if ever) seems to be about joy of any kind and *Gingerbread Man* is "an interactive musical study of nine characters," whom the liner notes freely admit live in their individual "tormented worlds."

BIG DEALS IN TOWN!

PENTIUM 90 MHz
Quad Speed MultiMedia VLB or PCI
- Pentium PCI, 256K Write Back Cache
- 8 MB RAM, 72 Pins, CPU Heat Sink & Fan
- **420 MB IDE Drive**
- PCI IDE, 2 serial, 1 parallel, 1 game ports
- 1.44 Floppy Drive
- **14" Non-Interlaced, .28dp Monitor**
- PCI SVGA accelerator CARD W/1MB, EXP. TO 2 MB
- **Mitsumi QUAD speed CD ROM Drive**
- Sound Blaster Sound Card
- MultiMedia Shielded Speakers, Mic.
- 12 CD Titles, Incl. Encyclopedia
- Enhanced 101 Keyboard, 3 Button Mouse

$1975

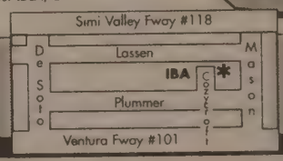
MULTIMEDIA
486 DX2-66 MultiMedia
SE HABLA ESPAÑOL
- Intel 486 DX2-66 CPU PENTIUM P24T Upgradable
- 4 MB RAM, CPU Heat Sink & Fan
- **420 MB IDE Drive**
- 1.44 Floppy Drive
- VLB IDE, 2 serial, 1 parallel, 1 game ports
- **14" Non-Interlaced, .28dp Monitor**
- VLB SVGA accelerator CARD W/1MB, EXP. TO 2 MB
- **Mitsumi dual speed CD ROM Drive**
- 16 Bit Stereo Sound Card
- MultiMedia Shielded Speakers, Mic.
- 12 CD Titles, Incl. Encyclopedia
- Enhanced 101 Keyboard, 3 Button Mouse

$1099 SUPER VALUE!

IBM 486-100 256K
Blue Lightening MultiMedia
SUPER BUY
- IBM 486BL-100, VESA Local Bus
- Math Co-processor/Pentium upgradable
- **4 MB RAM**
- **420 MB Hard Drive**
- **Double Speed CD ROM Drive**
- 16 Bit Stereo Sound Card
- **14" Non-Interlaced, .28 Monitor**
- 1.44 Floppy Drive
- 101 Keyboard, 3 Button
- 12 CD Titles, Incl. Encyclopedia
- Super IDE I/O

3 YR. IBM Motherboard Warranty

$1149



Please Call For Other Configurations

IBA Computers
9748 Cozycroft Ave. Suite F
Chatsworth, CA 91311

WE WILL MEET OR BEAT ANY ADVERTISED PRICE!
(818) 772-6699
FAX (818) 993-8203

• prices reflect cash discount • not responsible for typographical errors • prices & availability subject to change without notice

Attention Dealers:
GET TOTALLY WIRED
With TTS Mutimedia Systems Audio Cables experience the full impact of Multimedia CD Audio.
- **Cables to connect** any CD ROM drive to any Sound Card
- MIDI expansion kits
- **Attach External CD Drives** to Internal Sound Cards with the new ES/1 kit.

TTS uses only the highest quality double shielded, no noise wire, AMP and Molex connnectors and eye appealing shink tube reinforcement. Other specially molded cables available for resale.
Call us before your customers do!

multimedia TTS systems
2045 San Elijo Avenue
Cardiff, CA 92007
Dealer Support
619•942•5391
EndUser Support
800•887•4968
FAX: 619•632•9957

Walnut Creek CDROM
4041 Pike Lane, Suite D-452
Concord, CA 94520
1-800-786-9907
1-510-674-0783
Fax: 1-510-674-0821
orders@cdrom.com
All Our Discs Are Unconditionally Guaranteed!!!

Your Best CDROMs!

Cica MS Windows CDROM	4000 new Windows programs - quarterly updates	$ 29.95*
Giga Games CDROM	3000 hot Games for MSDOS and Windows	$ 39.95*
Space and Astronomy CDROM	Thousands of NASA images and data files	$ 39.95*
C User Group Library CDROM	A collection of user supported C source code	$ 49.95*
Simtel MSDOS CDROM	Classic: 650 MB Shareware / Freeware for MSDOS	$ 29.95*
QRZ! Ham Radio CDROM	FCC Callsign Database for Win & DOS + files	$ 29.95*
Gifs Galore CDROM	5000 mostly 640x480 GIF Images in every catagory	$ 39.95*
Gutenberg Project CDROM	Classic Literature and historical documents	$ 39.95
Hobbes OS/2 CDROM	600 MB always current Shareware/Freeware for OS/2	$ 29.95*
Source Code CDROM	650 MB of Unix & DOS source code for programmers	$ 39.95*
Internet Info CDROM	Thousands of computer, net, and internet documents	$ 39.95
X11/GNU CDROM	X Windows and GNU software for Unix and SPARC	$ 39.95
Aminet Amiga CDROM	650 MB new Shareware/Freeware for Amiga	$ 29.95*
GEMini ATARI CDROM	650 MB 3000 Programs for Atari - also for BBS use	$ 39.95*
Ada CDROM	Programming tools, Ada source code and docs	$ 39.95*
Nova for NeXT CDROM	600 MB black NeXT app's, src., docs, etc	$ 59.95*
Nebula for NeXTSTEP Intel	600 MB NeXTSTEP Intel app's, docs, etc	$ 59.95*
Garbo MSDOS/Mac CDROM	MSDOS and Macintosh Shareware/Freeware	$ 29.95*
Fractal Freazy CDROM	2000 high resolution fractals - royalty free	$ 39.95
FreeBSD CDROM	Berkeley BSD. 32bit O/S for PC, w/ GNU & X11. Src	$ 39.95
Linux CDROM	Yggdrasil Linux. 32bit O/S for PC, w/ GNU & X11. Src	$ 49.95
La Coleccion CDROM	MSDOS, OS/2, Windows. Spanish descriptions	$ 39.95*
Sprite CDROM	Berkeley's experimental Distributed OS for Sun's	$ 29.95
CDROM Caddies	Standard type, highest quality, Lifetime guarantee!	$ 4.95

•Shareware programs require separate payment to authors if found useful.

COMPUTER PARTS

HARD DISK SPECIALS
540MB $199.97
Mode 3 Enh IDE 12ms Access Time
850MB $299.97
Mode 3 Enh IDE 10ms Access Time
1.08GB $399.97
Mode 3 Enh IDE 10ms Access Time

IBM 486SLC2-66
VLB MOTHERBOARD w/CPU
128K CACHE
$169.97

ATI mach64
VLB or PCI ACCELERATOR/1M
$139.97

Conner 420MB
INTERNAL TAPE BACKUP
$179.97

486DX2-66 VLB
VLB MOTHERBOARD/NO CPU
256K CACHE
$269.97

Sony 2X CD-ROM
250ms Access 342K/s Transfer
256K Cache IDE Interface
$109.97

Teac 4X CD-ROM
195ms Access 600K/s Transfer
SB MCD Interface
$199.97

MOTHERBOARDS

Intel Plato Pentium 90 PCI 256K (No CPU)	329
OPTi Pentium 90/100 PCI/VLB 256K (No CPU)	229
Pentium 90/100 PCI 256K (No CPU)	199
Pentium 60/66 PCI 256K (No CPU)	179
486DX2 PCI/VLB 256K (No CPU)	139
486DX2 VLB 256K (No CPU)	89
IBM 486SLC2-66 VLB 128K (w/CPU)	169

CPU/MEMORY

Cyrix 486DX2-50MHz	119
Cyrix 486DX2-66MHz	159
Intel i486DX2-66MHz	179
Intel Pentium 60MHz	419
Intel Pentium 90MHz	599
Intel Pentium 100MHz	899
486 CPU Cooling Fan	9
Pentium CPU Cooling Fan	19
Memory All Types	CALL

VLB GRAPHICS CARDS

ATI mach32 Graphics Wonder VLB 1M	119
ATI mach64 VLB 1M	139
ATI mach64 VLB 2M	199
ATI mach64 VLB 2M VRAM	279
ATI mach64 VLB 4M VRAM	479
Diamond Stealth 64 VLB 1M (2M-Add $60)	139
Trident 9400 VLB SVGA 1M	69

ISA GRAPHICS CARDS

Trident SVGA 512K 16-bit ISA	39
Trident SVGA 1M 16-bit ISA	59

PCI GRAPHICS CARDS

ATI mach32 Graphics Wonder PCI 1M	129
ATI mach64 PCI 1M	139
ATI mach64 PCI 2M	199
ATI mach64 PCI 2M VRAM	279
ATI mach64 PCI 4M VRAM	499
Diamond Alpine 64 PCI 1M (2M-Add $60)	139
Diamond Stealth 64 PCI 1M (2M-Add$60)	139
Diamond Stealth 64 PCI 2M VRAM	279

MONITORS

KFC 1511 15" Flat SVGA Non-Interlaced 0.28	279
MAG DX-15F 15" Flat NI 0.26/Digital	349
MAG DX-17F 17" Flat NI 0.26/Digital	579
MAG MX-17F 17" Flat NI 0.26/Digital	699
14" SVGA NI 0.28 Flat Screen (SPECIAL)	199
Color 15" Flat SVGA NI 0.28 Digital (SPECIAL)	299
Viewsonic 15 15" Flat NI 0.28/Digital	399
Viewsonic 17G 17" Flat NI 0.28/Digital	699
Viewsonic 17 17" Flat NI 0.27/Digital	799
Viewsonic 20 20" Flat NI 0.27/Digital	1399
Viewsonic 21 21" Flat NI 0.27/Digital	1699

HARD DRIVES

260MB IDE/Seagate	149
420MB IDE/Conner or Maxtor (12ms)	179
420MB IDE/Western Digital (Mode 3/11ms)	189
540MB IDE/Conner, Maxtor or Quantum (12ms)	199
540MB IDE/Western Digital (Mode 3/11ms)	229
540MB IDE/IBM (Mode 3/10.8ms)	229
540MB SCSI-2/Quantum (9ms)	249
730MB IDE/Western Digital (Mode 3/10ms)	269
850MB IDE/Western Digital (Mode 3/10ms)	299
1.08GB IDE/Western Digital (Mode 3/10ms)	399
1.08GB Fast SCSI-2/Conner (10ms)	499
1.2GB Fast SCSI-2/Fujitsu (9ms)	599
1.2GB Wide SCSI-3/Fujitsu (9ms)	699
2.1GB Fast SCSI-2/Quantum (9ms)	999

FLOPPY DRIVES

Mitsumi, NEC or Toshiba 5.25" 1.2MB	42
Mitsumi, NEC or Toshiba 3.5" 1.44MB	32
Teac 5.25" 1.2MB	45
Teac 3.5" 1.44MB	35

IDE CONTROLLERS

IDE I/O (2S/P/G) 16 Bit	13
VLB IDE I/O (2S/P/G)	19
VLB IDE I/O (2S/P/G) w/Mode 3 Enh IDE	39
VLB IDE I/O (2S/P/G) w/Mode 3 & 16550 Serial	69
Caching VLB IDE I/O w/Mode 3 & 16550 Serial	129
PCI IDE w/Mode 3 Enh IDE	29
PCI IDE I/O (2S/P/G) w/Mode 3 & 16550 Serial	69

SCSI CONTROLLERS

PCI NCR Fast SCSI-2 Controller	99
PCI NCR Fast Wide SCSI-3 Controller	179
Adaptec 1522BK SCSI	129
Adaptec 1542BK SCSI	199
Adaptec 2842 VLB SCSI	269
Adaptec 2940 PCI SCSI-2	229
Adaptec 2940W PCI Wide SCSI-3	329
VLB SCSI (up to 7 Devices)	129
VLB IDE & SCSI (up to 7 Devices)	149

SOUND CARDS

Jazz 16 MCD	49
Sound Blaster 16 Multi-CD	79
Sound Blaster 16 SCSI-2	99
Sound Blaster AWE32 (HOT!)	249
ASP Upgrade Chip for Sound Blaster 16	59

CD-ROM DRIVES

Panasonic 562 2X (320ms) (SPECIAL)	115
Sony 55E 2X IDE (250ms)	119
Mitsumi 4X IDE (195ms)	219
Teac CD-55 4X (195ms)	219
Toshiba 4X SCSI-2 (150ms)	299

FAX MODEMS

9624 Fax Modem Internal	35
14.4 Fax Modem w/Voice Mail Internal	69
28.8/14.4 Fax Modem Internal	159
US Robotics 14.4 Fax Modem Internal	99
US Robotics 14.4 Fax Modem External	129
US Robotics 28.8 Fax Modem Internal	199
US Robotics 28.8 Fax Modem External	239

TAPE BACKUPS

Conner 250MB Internal (TAPE INCLUDED)	139
Conner 420MB Internal (TAPE INCLUDED)	189
Conner 850MB Internal	349
Conner 250MB External w/Parallel SCSI	329
Colorado 250MB Internal	149
Colorado 350MB Internal	189

NETWORKING

Ethernet 16-bit Jumperless Combo (BNC/RJ)	35
Ethernet 10BaseT Hub 8 Ports	199
Ethernet 10BaseT Hub 16 Ports	299

CASES

Mini Tower Case/230W UL PS (5 Drive Bays)	39
Medium Tower Case/230W UL PS (7 Drive Bays)	59
Full Tower Case/250W UL PS (10 Drive Bays)	79

KEYBOARD/MOUSE

Enhanced 101-Key	15
Focus 6000 101 Key	25
Focus 9000 124 Key w/Calculator	49
Fujitsu K4700 101 Key	45
IBM 101 Key (Genuine IBM Click Feel)	45
Hi-Res 3 Button Serial Mouse	9
Microsoft Serial	29

SPEAKERS

12 Watt Amplified	15
40 Watt Power Amplified	39
80 Watt Super Bass Power Amplified	59
120 Watt Super Bass Power Amplified	69

SOFTWARE

Microsoft DOS 6.22/Windows 3.11 (w/system)	79
Microsoft Windows for Workgroups 3.11	69

PRINTERS

Hewlett Packard Deskjet 540 (Color Kit Add $45)	279
Hewlett Packard Deskjet 560C	469
Hewlett Packard Deskjet 1200C	1,399
Hewlett Packard Laserjet 4L	629
Hewlett Packard Laserjet 4P	949
Hewlett Packard Laserjet 4 Plus	1,369

CD TITLES

SPECIALS THIS MONTH

Compton's Interactive Encyclopedia	$19.97	Iron Helix	$19.97
Animals	$9.97	SimCity 2000	$19.97
Just Grandma & Me	$14.97	Return to Zork	$19.97
7th Guest	$19.97	Rebel Assault	$24.97
Microsoft Golf	$29.97	Frankenstein	$24.97
Microsoft Baseball	$29.97	Myst	$29.97
		Sierra Outpost	$29.97

5 Foot 10 Pak Vol 2 (10 CDs)	29	Legends of Oz	19
7th Guest (2 CDs)	19	Man Enough (2 CDs)	25
Aegis: Guardian of the Fleet	25	Mathematics Library	19
Ambush at Sorinor	19	Mavis Beacon Teaches Typing	19
America Alive!	19	Mayo Clinic Health Book	19
Animals, San Diego Zoo	9	MegaRace	19
Arthur's Teacher Troubles	15	Microcosm	19
Asia Alive!	19	Microsoft Bookshelf '94	39
Auto Almanac	19	Microsoft Cinemania	39
Back Road Racers	19	Microsoft Dinosaurs	39
Barney Bear Goes to School	19	Microsoft Golf	29
Barney Bear Goes to Space	19	Microsoft Works 3.0 MM	39
Beauty & the Beast	9	Monarch Notes	19
Blue Force	19	MPC Wizard 3.0	19
Business 500	19	Multimedia World History	19
Business Library (12 Titles)	19	Nat'l Geographic: Birds	9
Central Intelligence	19	Nat'l Geographic: Butterflies	9
Children's Dictionary	19	Nat'l Geographic: Dinosaurs	9
Civilization	19	Nat'l Geographic: Farm Animals	9
College Handbook	19	Nat'l Geographic: Mammals	9
Compton's Int. Encyclopedia	19	Nat'l Geographic: Spiders	9
Conspairacy	19	Nat'l Geographic: Whales	9
CyberRace	19	National Parks	19
Dameon's Gate	25	Panzer Geberal	25
Dark Seed	25	Parenting	19
Dark Sun: Shattered Lands	25	PC Library	19
Day of the Tentacle	25	Peter & the Wolf	9
Destination: Mars	19	Protostar	19
Dinosaur Adventure	19	Quick & Easy Spanish	19
Dr. T's Sing-Along for Kids	19	Rebel Assault	25
European Racers	19	Relate with Ease	25
F-117A Stealth Fighter	15	Return of the Phantom	25
F15 Strike Eagle III	15	Return to Zork	15
Family Bible	19	Ring World	25
Family Doctor	19	Rock, Rap & Roll	15
Fonts Platinum	9	Shuttle	25
Gardening	19	SimCity 2000	19
Great Literature Plus	19	Space Adventure	19
Grolier's Encyclopedia 1.5	9	Sports Illustrated Almanac	19
Grolier's Encyclopedia 6.0	19	Star Crusader	19
Gunship 2000	19	Star Trek-25th Aniversary	19
Haldeman Diaries: Nixon Yrs	19	Subwars 2050	19
Harpoon CD-ROM	19	Syndicate	29
Hobbe's OS/2	19	TFX Tactical Fighter	25
Inca II	25	The Lawnmower Man	25
Indiana Jones/Fate of Atlantis	19	Tortoise & the Hare	35
Iron Helix	19	Tuneland with Howie Mandel	25
Just Grandma & Me	15	Twain's World	19
Kid's Read: Aesops Fables	15	U.S. Air Force: Clips	9
Kid's Read: Benjamin Bunny	9	U.S. Amphibious Assault: Clip	9
Kid's Read: Cinderella	15	U.S. Atlas MPC	19
Kid's Read: Heather Hits	15	U.S. Marines: Clips	9
Kid's Read: Mud Puddle	15	U.S. Military Helicopter: Clips	9
Kid's Read: Paper Bag Princess	15	U.S. Navy Aircraft: Clips	9
Kid's Read: Peter Rabbit	15	U.S. Navy Ships: Clips	9
Kid's Read: Scary Poems	9	Ultimate Domain	19
King's Quest VI	19	USA Today	19
Kodak Photo CD Access	15	Webster's Kids Dictionary	19
Legend of Kyrandia	25	Win Platinum	9
		Wander Lust Interactive	39

NEW ARRIVALS
NEW TITLES EVERY WEEK!

Compton's Encyclopedia '95	29
Cybena	49
Doom 2	49
Dracula Unleashed	19
Frankenstein	25
Great Naval Battles	25
Hell: Cyperpunk Thriller	49
Hellcab: NYC Tourist Guide	25
Infopedia Encyclopedia '95	39
Journeyman Project Turbo	19
King's Quest 7	49
Legend of Kyrandia 2: Fate	25
Mad Dog McCree 2	19
Mayo Clinic Pharmicist	19
Microsoft Ancient Lands	39
Microsoft Complete Baseball	29
Microsoft Dangerous Creatures	39
Microsoft Encarta '95	49
Outpost	25
Ozzie's World	19
Rise of the Robots	49
U.S. Navy Fighters	49
UFO: Enemy Unknown	25
Under A Killing Moon (4 CDs	49
Virtual Vegas	25
Wing Commander 3 (4 CDs)	59
Wolf	19

ADULT CD TITLES
MUST BE 18 OR OLDER!

Adult Movie Almanac	39
Adult NiM 6 Pak (6 CDs)	69
Adventures of Seymour Butts	39
Asian Heat	29
Biker Babes	19
Defending Your Sex Life	29
Dream Machine (HOT!)	39
Erotic Adult Sampler	9
House of Dreams	29
Immortal Desire	29
Ladies Club: Power Night	29
Legend 4	29
Legends of Porn	29
Menage A Trois	29
Model Wife	29
Naughty Butt Nice	29
New Wave Hookers 2	29
Night Watch Interactive	39
Passion	19
Sex	29
Seymour Butts in Paradise	29
Space Sirens	39
Sweet Body	19
Trax: Lords I Love You	29
Urotsujidiji (HOT!)	29
Virgins	29
Virtual Vixens (HOT!)	39

MULTIMEDIA KITS

STARTER 2X

2X DOUBLE SPEED
DOUBLE SPEED CD-ROM
16-BIT SB-COMPATIBLE SOUND CARD
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
MPC Multimedia PC
$199.97

EXPLORER 2X

2X DOUBLE SPEED
DOUBLE SPEED CD-ROM
SOUND BLASTER 16 MULTI-CD SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
Sound BLASTER
$229.97

ADVENTURER 4X

4X QUAD SPEED
TEAC QUAD SPEED CD-ROM
195MS ACCESS TIME · 600KB/S TRANSFER
SOUND BLASTER 16 MULTI-CD SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
Sound BLASTER
MPC Multimedia PC
$329.97
UPGRADE TO SOUND BLASTER AWE 32 - ADD $170

EMPEROR 4X-SCSI

4X QUAD SPEED
TOSHIBA 3501B QUAD SPEED SCSI CD
155MS ACCESS TIME · 600KB/S TRANSFER
SOUND BLASTER 16 SCSI-2 SOUND
PAIR OF STEREO SPEAKERS (15 WATTS)
23 TITLE SUPER BUNDLE (SEE SIDE BAR)
Sound BLASTER
MPC Multimedia PC
$429.97
UPGRADE TO SOUND BLASTER AWE 32 - ADD $240

ENVISION SUPER 23 TITLE BUNDLE

Infopedia '95
29 Volume Encyclopedia

- Merriam-Webster's Dictionary
- Roget's 21st Century Thesaurus
- Merriam-Webster's Dictionary of English Usage
- Merriam-Webster's Dictionary of Quotations
- World Almanac & Book of Facts
- Webster's New Biographical Dictionary
- Hammond's World Atlas
- Just the Fax
- Grammar Examiner
- Body Transparent
- Millionaire II
- The Fiction Advisor
- Jigsaw! The Ultimate Electronic Puzzle
- Algebra I First Semester
- Algebra II Second Semester
- The Bernstein Bears Learn About Counting
- The Bernstain Bears Junior Jigsaw
- Math Maze
- States & Traits
- Revolution 76
- Designasaurus

ENVISION MULTIMEDIA COMPUTER CENTERS
711G Fair Oaks Av South Pasadena

CALL 800-8-ENVISION

COMPUTERS Next 2 Pages

ENVISION® LA's #1
MULTIMEDIA COMPUTER CENTERS

AFFORDABLE PENTIUM POWER

Pentium POWERSTATIONS

Stuck in the computer slow lane? Then try Envision's Pentium Powerstations on for size! Envision has value priced Pentiums to fit your budget starting from under $1,600. With performance up to 250% faster than a 486DX2-66, they fly. At these prices, they'll leave our showrooms even faster! Come in to an Envision Multimedia Computer Center and try one on for size today.

Intel Pentium 250% Faster Than 486

Envision Pentium Powerstations are powered by advanced Intel Pentium technology for performance up to 250% Faster Than 486DX2-66s.

3.3 Volt Design

Envision Pentium 90 & 100 MHz Systems incorporate new 3.3 Volt technology for lower power comsumption and cooler operation so that your computer can run more optimally and efficiently.

Enhanced IDE Hard Disks

Enhanced IDE is standard on all Pentium Powerstations giving you super fast access to your data at lightning-fast 13 MB/s tranfer rates for up to 3x faster than IDE drives.

ATI 64-bit Accelerators

ATI's mach64 PCI graphics accelerators, winner of PC Magazine's Editor's Choice, are now standard on all Pentium Powerstationsgiving you three times faster graphics than average 32-bit graphics accelerators. That way, you can see what you want to see with less waiting.

Hi-Speed Serial Ports & Enhanced Parallel Ports

Every Envision Pentium Powerstation also comes with two hi-speed 16550 UART serial ports, for faster data transfer with your hi-speed modem or serial device, and an enhanced parallel port for bi-directional buffered communications between your printer and your computer for error-free printing.

Standard System Features

Intel Pentium-60, 90 or 100 MHz CPUs
4 PCI Local Bus Slots & 4 16-bit ISA Slots
Energy Star Green PC Power Saver
256K External Write-back Cache (ex to 512K)
3.5" 1.44MB Floppy Drive
32-bit Enhanced IDE HD Controller
Up to 11MB/s Transfer Rates (2-3x faster)
2 Hi-Speed 16550 Serial Ports
ECP/EPP Enhanced Parallel Port
Medium Tower Case/230W UL PS
Enhanced 101-key Keyboard & Serial Mouse

Multimedia System Features

Double or Quad Speed CD-ROMs
16-bit Sound Card or Sound Blaster 16
Pair of Speakers (Magnetically Shielded)
23 CD Titles included ($700 Value)

See *MULTIMEDIA KITS* on first page for full description

FINANCE as low as $50* per month

Maximus 60	$1,599
Maximus 90	1,849
Maximus 100	2,249

Standard System Features plus:
8MB RAM on-board, exp to 128MB
540MB Enhanced IDE HD (850MB-Add $100)
11ms Access Time & 11MB/s Transfer Rate
64-bit PCI ATI mach64 Accelerator/1M
Super Fast 64-bit Graphics Card
15" Flat SVGA Non-Interlaced Monitor (0.28)
Flat Screen & Low Radiation

MULTIMEDIA SYSTEMS	PENTIUM 60MHz	PENTIUM 90MHz	PENTIUM 100MHz
2X STARTER 2X	1799	2049	2449
2X EXPLORER 2X	1829	2079	2479
4X ADVENTURER 4X	1929	2179	2579
4X EXPLORER 4X-SCSI	2029	2279	2679

Colossus 60	$2,499
Colossus 90	2,749
Colossus 100	3,149

Standard System Features plus:
16MB RAM on-board, exp to 128MB
1.08GB Enhanced IDE Hard Disk
10ms Access Time & 11MB/s Transfer Rate
64-bit PCI ATI mach64 Accelerator/2M
PC MAGAZINE'S EDITOR CHOICE
Mag DX17F 17" Flat SVGA NI Monitor (0.26)
Award Winning 17" Flat Screen Monitor

MULTIMEDIA SYSTEMS	PENTIUM 60MHz	PENTIUM 90MHz	PENTIUM 100MHz
2X STARTER 2X	2599	2949	3349
2X EXPLORER 2X	2729	2979	3379
4X ADVENTURER 4X	2829	3079	3479
4X EXPLORER 4X-SCSI	2929	3179	3579

Supremus 60	$2,999
Supremus 90	3,249
Supremus 100	3,649

Standard System Features plus:
16MB RAM on-board, exp to 128MB
1.08GB Wide SCSI-3 HD
Adaptec 2940W Wide SCSI-3 Controller
64-bit PCI ATI mach64 Accelerator/2M
World's Fastest Graphics Card
Mag DX17F 17" Flat SVGA NI Monitor (0.26)
Award Winning 17" Flat Screen Monitor

MULTIMEDIA SYSTEMS	PENTIUM 60MHz	PENTIUM 90MHz	PENTIUM 100MHz
2X STARTER 2X	3199	3449	3849
2X EXPLORER 2X	3229	3479	3879
4X ADVENTURER 4X	3329	3579	3979
4X EXPLORER 4X-SCSI	3429	3679	4079

It answers the phone! It faxes! It plays music & data CDs! It's even a TV*?!?

Introducing Family•STATION

FamilySTATION... it's a whole new type of computer. That's because it's not just a computer, it's also a fax machine, modem, answering machine, CD stereo system, cable-ready TV, video game player & multimedia computer all in one complete unit. It also includes loads of useful software for the whole family. With Microsoft Works which includes a spreadsheet, word processor & database, Dad can bring home work from the office. Mom can manage the family finances with Microsoft Money. Son can research the world with the 21 Volume Compton's Encyclopedia. Daughter can find the latest news for her report with America Online. Imagine doing so much from one place! It's FamilySTATION... built with your family in mind

Intel Inside

Envision FamilySTATIONs are powered by genuine Intel 486 & Pentium technology for maximum performance, reliability and 100% guaranteed compatibility

It's a CD Stereo System

You can select you favorite music CD to keep you relaxed while you type away. And with a built-in mixer, you can adjust the volume or balance.

It's a Video Game Player

Play your favorite video game like Rebel Assault or SimCity 2000. You'll get blown away by the realistic sounding sound effects from the built-in 16-bit sound card. And you can plug in your favorite joystick.

It's an Answering Machine

The FamilySTATION can answer your phone with the built-in voice mail system. It can direct messages to up to 999 mailboxes or page you when you get a message.

It's a Fax Machine & Modem

Receive or send faxes anywhere in the world with the built-in fax. Or call your favorite online service to see the latest news, shop at thousands of stores, or check your bank account balance with the built-in modem. You can even hook into Internet, that "information superhighway" you've been hearing so much about.

It's a Cable-Ready TV*

You can add optional TV capability to your FamilySTATION so that you can watch the latest news or your favorite programs without leaving your PC.

It's a Multimedia Computer

At the heart of every FamilySTATION is a full multimedia compter system ready to access the more than 5000 multimedia CD-ROM titles now on the market from 21 volume full encyclopedias to interactive stories that read to kids to educational programs that can teach you kids subjects like history or calculus or access great works of literature to exciting games that let you conquer the world or build your own special world.

It's Loaded with Software

It comes with lots of software like Microsoft DOS, Microsoft Windows, Microsoft Works, Microsoft Money, Compton's Encyclopedia, America Online, and over 20 more exciting titles including exciting action-packed games.

**Optional TV capability is $179 extra*

SPECIFICATIONS

Intel 486 or Pentium CPUs
4MB Memory, ex to 64MB (8MB-Add $160)
3.5" 1.44MB Floppy Drive
425MB Hard Drive, upgradable to 1,080MB
14" Super VGA Non-Interlaced Monitor (0.28)
Enhanced 101-key Keyboard & Mouse
Double Speed CD-ROM Drive
16-bit Stereo Sound Card & Speakers
14,400bps Fax & Modem
Voice Mail Phone Messaging System
Optional TV Tuner available

LOADS OF SOFTWARE INCLUDED

Microsoft DOS 6.22
Microsoft Windows 3.11
Microsoft Works 3.0
Microsoft Money 3.0 (family finance manager)
29 Volume Infopedia 1995 Encyclopedia
America Online & over 20 more exciting titles!

4 Models to Choose From

486SLC2-66	$1,299
486DX2-66	$1,399
Pentium 60	$1,799
Pentium 90	$1,999

OR FINANCE FROM $51/MO

COMPUTER SOURCE

PAY NO INTEREST TIL MAY 1995

486 VLB STATIONS

$898 486DX2-66 | **$948** 486DX2-80 | **$1048** 486DX4-100

- 486DX2-66, DX2-80 or DX4-100 CPU
- Pentium Overdrive Upgradable (P24T)
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 64 MB
- 3.5" 1.44M Floppy Drive
- 425 MB IDE Hard Disk (Add $40 for 540MB)
- 32-bit VLB IDE-I/O HD/FD Controller
- 32-bit Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Mini Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $33* per month

WITH MULTIMEDIA

	MULTIMEDIA SYSTEMS	486DX2 66MHz	486DX2 80MHz	486DX4 100MHz
2X	**STARTER 2X** DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD	1098	1148	1248
2X	**EXPLORER 2X** DOUBLE SPEED CD-ROM SOUND BLASTER 16	1128	1178	1278
4X	**ADVENTURER 4X** TEAC 4X CD-ROM (195ms) SOUND BLASTER 16	1228	1278	1378
4X	**EXPLORER 4X-SCSI** TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2	1328	1378	1478

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

486 PCI/VLB STATIONS

$998 486DX2-66 | **$1048** 486DX2-80 | **$1148** 486DX4-100

- 486DX2-66, DX2-80 or DX4-100 CPU
- Dual PCI & VLB Local Bus Architecture
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 64 MB
- 3.5" 1.44M Floppy Drive
- 540 MB IDE Hard Disk (Add $100 for 850MB)
- 32-bit IDE-I/O HD/FD Controller
- 32-bit PCI Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Mini Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $36* per month

WITH MULTIMEDIA

	MULTIMEDIA SYSTEMS	486DX2 66MHz	486DX2 80MHz	486DX4 100MHz
2X	**STARTER 2X** DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD	1148	1198	1298
2X	**EXPLORER 2X** DOUBLE SPEED CD-ROM SOUND BLASTER 16	1178	1228	1328
4X	**ADVENTURER 4X** TEAC 4X CD-ROM (195ms) SOUND BLASTER 16	1278	1328	1428
4X	**EXPLORER 4X-SCSI** TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2	1378	1428	1528

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

PENTIUM PCI STATION

$1298 PENTIUM 60 | **$1548** PENTIUM 90 | **$1948** PENTIUM 100

- Pentium 60, 90 or 100 MHz CPU
- 256K External Write-Back Cache
- 4 MB 72 Pin RAM, exp to 128 MB
- 3.5" 1.44M Floppy Drive
- 540 MB IDE Hard Disk (Add $100 for 850MB)
- 32-bit IDE-I/O HD/FD Controller
- 32-bit PCI Super VGA Graphics Accelerator/1M
- 14" 1024x768 SVGA NI Monitor (0.28dp) NON-INTERLACED/GREEN PC/LOW RADIATION
- 2 Serial/Parallel/Game Ports
- Medium Tower Case, 101-key Keyboard & Mouse

FINANCE as low as $44* per month

WITH MULTIMEDIA

	MULTIMEDIA SYSTEMS	PENTIUM 60MHz	PENTIUM 90MHz	PENTIUM 100MHz
2X	**STARTER 2X** DOUBLE SPEED CD-ROM 16-BIT JAZZ SOUND CARD	1498	1748	2148
2X	**EXPLORER 2X** DOUBLE SPEED CD-ROM SOUND BLASTER 16	1528	1778	2178
4X	**ADVENTURER 4X** TEAC 4X CD-ROM (195ms) SOUND BLASTER 16	1628	1878	2278
4X	**EXPLORER 4X-SCSI** TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2	1728	1978	2378

SEE MULTIMEDIA KITS ON FIRST PAGE FOR FULL DESRIPTION

PERFORMANCE, SERVICE & OPTIONS!

MORE PERFORMANCE

*Envision doesn't only have the lowest price on computers in town, it also has the **highest performance computers** in town utilizing the latest and best in **new computer technologies**.*

4X - QUAD SPEED CD-ROM

Quad-speed CD-ROM drives are now available in the entire lineup of Envision systems giving you a whole new dimension in multimedia performance. With 600KB/s Transfer Rates, they run twice as fast as regular double speed CD-ROM drives and 50% faster than triple speed CD-ROM drives for xtra performance.

MODE 3 ENHANCED IDE HD

*Many Envision systems now incorporate the newest in hard drive technology like **Mode 3 Enhanced IDE**. With **transfer rates of 13.3 MB/s**, Mode 3 Enhanced IDE represents a new breed of hard drives designed for optimal performance. Running up to **3 times faster** than typical IDE drives and faster than even SCSI-2 drives, Enhanced IDE really gives you more bang for your buck.*

FAST 64-BIT GRAPHICS

*Many Envision Systems now feature **super fast 64-bit Graphics Accelerators**, which process video data **64 bits** at a time, for video performance that is more than **twice as fast** as normal 32-bit accelerators making them perfect for handling and processing complex graphics like CAD, desktop publishing graphics design and animation, and vector/raster graphics.*

MORE SERVICE

Envision also has some of the best service and support. At Envision, we feel that it the most important factor in choosing a computer is not the price or performance, but the place you buy it from. That's why our staff is dedicated to giving you the best service and support possible.

2 YEAR LABOR/1 YEAR PARTS WARRANTY

*All Envision Systems are backed with Envision's exclusive **2 years labor** and **1 year parts warranty** for piece of mind.*

GE Service Protection Plus Extended 4 Year Service Plans

*And for added piece of mind, you can add a **4 year on-site extended service plan** from General Electric - the nation's leader in high technology service and suport.*

96 HOUR BURN-IN TESTING

*All Envision Systems are run through Envision's comprehensive **96-hour burn-in** testing to ensure system integrity & reliability.*

ASSEMBLED IN THE USA

*Envision Systems are assembled right here in the **United States** at our Southern California computer factory using only the finest components made by such big manufacturers as **Intel, IBM, Conner, Teac, Sony, ATI, Diamond** and **Creative Labs**.*

CUSTOM CONFIGURATIONS

Envision has many different models to choose from but if you don't see the configuration that best suits your need, we would be happy to custom configure your system the way you want. Just ask your friendly Envision sales representative for more details on the many options that you can add.

FINANCING

Envision offers you many differents ways to buy an Envision computer. You can pay by cash, check, VISA, MasterCard, or Discover. Envision also has many different financing plans to fit your budget.

90 DAYS SAME AS CASH

*You can select our 90 days same as cash plan which gives you up to **90 days** to pay for your computer **without paying any interest!***

MONTHLY PAYMENT PLANS

*You can also select our closed-end **financing plans** with terms of **up to 60 months** with reasonable monthly payments that won't break the bank.*

A FRIENDLY & KNOWLEDGABLE STAFF

8+ YEARS IN THE INDUSTRY

The Fine Print: Prices are based on C.O.D. Cash and reflect cash discount. Prices are good with this ad only. *Financing figures are estimated and are based on 36 months. Final financing figures may be different and financing is on approved credit. Prices, configurations and availability are subject to change without notice. All sales are final. Warranties are carry-in only and do not include on-site service. Not responsible for typo errors.

486 VALUESTATIONS

486DX2/4 VALUESTATIONS

Standard System Features

- 486DX2-66, DX2-80 or DX4-100 MHz CPU
- 8MB RAM on-board, exp to 64MB
- Energy Star Green PC Power Saver
- 256K L2 External Write-back Cache
- 3.5" 1.44MB Floppy Drive
- 540MB Enhanced IDE HD (850MB-$100)
- 11ms Access Time & 11MB/s Transfer Rate
- 32-bit Enhanced IDE HD Controller Up to 11MB/s Transfer Rates (2-3x faster)
- 15" Flat SVGA Non-Interlaced Monitor (0.28)
- Diamond Stealth 64 Graphics Accelerator/1M
- Medium Tower Case/230W UL PS
- Enhanced 101-key Keyboard & Serial Mouse

Multimedia System Features

- Double or Quad Speed CD-ROMs
- 16-bit Sound Card or Sound Blaster 16
- Pair of Speakers (Magnetically Shielded)
- 23 CD Titles included (*Over $700 Value!*)

See ***MULTIMEDIA KITS*** on first page for full description

FINANCE as low as $43* per month

ENERGY STAR EPA POLLUTION PREVENTER

ENHANCED IDE

Ultima VLB

486DX2-66	$1,249
486DX2-80	$1,299
486DX4-100	$1,399

	MULTIMEDIA SYSTEMS	486DX2 66MHz	486DX2 80MHz	486DX4 100MHz
2X	**STARTER 2X** DOUBLE SPEED CD-ROM	1449	1499	1599
2X	**EXPLORER 2X** DOUBLE SPEED CD-ROM	1479	1529	1629
4X	**ADVENTURER 4X** TEAC 4X CD-ROM (195ms)	1579	1629	1729
4X	**EXPLORER 4X-SCSI** TOSHIBA 4X CD-ROM (155ms) SOUND BLASTER 16 SCSI-2	1729	1779	1879

Performa PCI/VLB

486DX2-66	$1,299
486DX2-80	$1,349
486DX4-100	$1,449

	MULTIMEDIA SYSTEMS	486DX2 66MHz	486DX2 80MHz	486DX4 100MHz
2X	**STARTER 2X**	1498	1548	1648
2X	**EXPLORER 2X**	1528	1578	1678
4X	**ADVENTURER 4X**	1628	1678	1778
4X	**EXPLORER 4X-SCSI**	1728	1778	1878

ENVISION®

MULTIMEDIA COMPUTER CENTERS

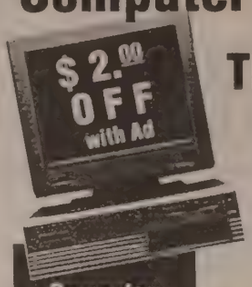
800.8.ENVISION

Fax: 818.403.9380 Tech Support: 818.403.9389

711G Fair Oaks Ave. · South Pasadena, CA 91030

Hours: Mon-Sat 10:30A-7P Sun 12N-6P

CompuWest
Computer Show & Sale Expo



The Latest in Hardware and Software

Wholesale Prices to the Public at the

Airport Marina Resort Hotel & Tower

8601 Lincoln Blvd.,Los Angeles, CA 90045
By Los Angeles International Airport

March 25 & 26

Saturday & Sunday • Show Hours 10AM-5PM

DEALERS SIGN-UP NOW

Admission $ 6.00

($2.00 Off with this Ad, one coupon per person)

FREE PARKING

Upcoming Show May 27 & 28

For information call:
(213) 462-6775
Media Space Buyer

Computers
CD-Rom
Monitors
Modems
Hard Disks
Memory
Printers
Multi Media
Games
Books
Shareware
Peripherals
much more...

FREE NetWare®
when you enroll in our Novell CNE training

Mt. Sierra College helps you start your career as a Certified Novell Engineer (CNE) with all the tools you need to become a trained professional:

- **FREE Novell NetWare** software.
- **Day, evening, and weekend classes,** with supervised computer labs open 7 days a week.
- Limited class size and 1:1 student-to-workstation ratio so you get **personal attention.**
- **Authorized Novell Courseware** taught by Certified Novell Instructors (CNIs).
- **Job placement** and career services.

Classes start soon. Call now to reserve your seat.

(800) 240-2500 ext. 302

(818) 351-9995 ext. 302

Mt. Sierra College
350 N. Halstead Street
Pasadena, CA 91107

Novell Authorized Education Center

MULTIMEDIA 101 *continued...*

Thankfully, the escape key works just like its name.

The main screen is called the "EnterEye." (The Residents have some sort of fixation about eyes.) There's a little Gingerbread Man who spins around in the middle of the screen. If you hold him down, he'll spin faster and faster, sometimes vocally complaining about it and sometimes appearing to almost enjoy the sensation. He's spinning inside a circle of pairs of eyes, highlighting each as he passes. When he stops, they utter a short phrase.

The Gingerbread Man is very responsive to mouse control and easy to point wherever you want him. Click on a pair of eyes and you get that character's song, aka its "tormented world." It's worth noting that both the position of the characters and the associated phrase change as you reenter the EnterEye after checking out a song.

Marc Canter: "And then I thought, 'Who the hell cares about Marc's media band? Let's get a mythology around it.' So we created the story of four students who went to the John Cage Academy of Multimedia some time in the future."

This deliberate obfuscation is almost the Residents' trademark, as those who are semi-familiar (which is about as familiar as you can get) with them know. Over the years the individual Residents have remained steadfastly anonymous, cultivating an air of mystery and a strange world of their own anti-personality—to the point where it *is* their personality, as well as a crafty marketing technique. The manual for *Gingerbread Man* continues this theme in an almost heavy-handed way, with much reference to "sources close to The Residents," mention of odd methods of communication between The Residents and Ion, and warnings that "since we're talking about The Residents, we obviously will never really know."

What is apparently true is that, while The Residents produce the music and Jim Ludtke and a team of other named artists contribute graphic design, Ty Roberts and other members of the Ion team do the actual programming. Thus, the truth behind the claim that "even The Residents themselves have no idea what will happen during the playback of a song" is perhaps a little, ahh, shaded—but still true.

TORMENTED WORLDS

Once you enter the "tormented world" of a character, there is an initial sequence of music and graphics with which you cannot tamper—sorry, I mean interact. Shortly, however, you are cued by the reappearence of the cursor, appearing as a nifty top-hatted eyeball with tiny little letters spelling out the name of the song within the eyeball, indicating that you are now able to make things happen.

Basically, your mouse can drag the character's head around as a paintbrush, while different sets of keys on your keyboard will trigger different visual and audio elements, e.g. Y-P will make the character speak (with phrases that are also used in the EnterEye screen) or occasionally sound like a detuned harp; Z-M will reveal relevant life images while A-G will produce the character's animated thoughts.

There's actually a lot going on, and it's very robust—I hit every key repeatedly and simultaneously and it never crashed, although

MICRO LEAGUE, THE EXPERTS IN SOURCING PRODUCTS. IF WE CAN'T GET IT...IT'S NOT OUT THERE.

90 DAYS FREE FINANCING AVAILABLE

1995 ELECTRONIC PRICE BOOK *OVER 25,000 ITEMS. *SEARCH BY MANUFACTURER ITEM PART NO. OR DESCRIPTION. *UPDATED MONTHLY. *LIST OF MANUFACTURER'S PHONE NUMBERS, BULLETIN BOARDS, TECHNICAL SUPPORT. *CREATE PROFESSIONAL QUOTES.

ViewSonic

PENTIUM

Intel PCI Motherboard

w/3PCI Slots & 256K Cache, Heat Sink & Cooling Fan.
Built-in IDE & I/O (2S/1P/1G)
8MB RAM
Conner 1 Gig IDE Hard Drive
Teac 3.5" 1.44MB Floppy Drive
64 Bit PCI Graphics Accelerator Card w/1MB
14" SVGA Monitor (1024x768) .28 (Low Radiation) NI
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop Case w/Power Supply

Pentium DX-100MHz $2599**
Pentium DX-90MHz $2099**
Pentium DX-66 $1799**

Multimedia Kit

Philips CD-ROM
375MS Access, 153.6KB/S Transfer Cable, Interface Card $79

Media Vision
Pro Audio 16 SoundCard CD-Quality, 16-Bit Digital Audio, Advanced 20 Voice Synthesizer $79

- 16 Bit CD Quality Sound Card
- Multimedia Magnetically Shielded Speakers
- Many CD Titles

DOUBLE SPEED CD-ROM $219
4x QUAD SPEED CD-ROM $445

VESA Local Bus System

3 VL-Bus Slots 4MB RAM
256K Cache, Pentium P24T Ready
Teac 3.5" 1.44MB Floppy Drive
420 MB IDE Hard Drive
32-Bit V-Local Bus Super IDE & I/O
(2 Serial, 1 Parallel, 1 Game Ports)
32-Bit V-Local Bus SVGA Card w/1MB
14" SVGA Monitor (1024x768) .28 Color
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop case
w/230 Watt Power Supply

486DX2/66 ..... $959**
486DX4/100 ..... $1269**

**w/purchase of GE Extended Warranty

TOSHIBA
Canon
EPSON
NEC
Panasonic
COMPAQ
HEWLETT PACKARD
TEXAS INSTRUMENTS
CITIZEN
OKIDATA
IBM Authorized Dealer
SCO

POWER PC

Power Macintosh 7100/66

Authorized Dealer & Service Center

Quadra 630

- 68040 Processor with Integrated Math Co-Processor
- 66/33MHz Speed
- Four Expansion Slots for Ethernet, Modem, Video, or TV tuner Cards.
- 1MB VRAM for built-in Monitor Support

4MB 250HD **$1059**

Performa 575

68030/33/66MHz
5MB, 250 HD, Int. CD-ROM, 14" Color Monitor, Global Village 24/98 Fax/Modem, Keyboard & Mouse

$1679

Performa 630CD

68040-66MHz, 8MB Ram, 250HD, 14" plus display, Design Keyboard, Int. CD-ROM, Fax/Modem, 6 CD Titles

$1829

POWER MAC 6100/60

- 60MHz Power PC
- 1MB VRAM
- Built-in Local Talk & High Speed Ethernet Connections
- System 7.5

8MB 350HD,CD **$1869**
8MB 350HD **$1639**

APPLE POWERBOOK

PowerBook 150, 68030-33MHz
4MB/120HD $1230
PowerBook 520, 68040-50/25MHz
4MB/160HD $2089
PowerBook 520C, 68040-50/25MHz
4MB/160HD $2599
PowerBook 540C,68040-66/33MHz
4MB/320HD ..... CALL

TOSHIBA

Authorized Service Dealer

T1910CS 486SX-33, 4MB/200(COLOR). . $1759
T1960CS 486DX2-50
4MB/320 ..... $2299
T1960CT 486DX2-50
4MB/200/320 ..... $2599/CALL
T4800CT 486DX4-75 8MB/500HD . . $4399
SPECIAL **T3400CT** Protege 486DX/33
4MB/250HD. $1999
NEW **T2400CT** 486DX2-50
8MB/250/320HD. . . $2999/CALL
T4900CT, Pentium 75MHz,
8MB/810HD. ..... IN STOCK

DAYTEK 3 Year Warranty

14" SVGA Color Monitor, .28 N/I. . . $219
15" SVGA MultiSync, Low Radiation, Flat
1280x1024 ..... $319
17" SVGA MultiSync, Low Radiation, Flat
1280x1024 ..... $575

#1 IBM Authorized Advanced Product Dealer & Service Center.

THINKPAD 755CE
486 DX4/100
8MB,340
$5999

Authorized Warranty Repair Provider, On Site Service, Rental Delivery & Set Up, Training, Technical Support, Network Specialist.

COMPAQ *Authorized Dealer & Service Center*

NEW Contura 400 DX2/40C
4MB/250HD (COLOR) $2499
Contura 400 DX2/40CX
4MB/250HD (ACTIVE) $3059
Contura AERO 4/33C, 486DX-33
4MB/250HD Mono w/Floppy. $1849

LTE ELITE 4/50CX
8MB/340HD (TFT) $4535
LTE ELITE 4/75CX
8MB/340HD/510 ..... CALL

ALL DESKPRO, PROSIGNIA, PROLIANT MODELS AVAILABLE AT LOWEST PRICES CALL US!

Authorized Dealer & Service Center

OKIDATA
320/321 9PIN $309/419
ML380, 24PIN..... $215
520/521 9PIN..... $375/489
590/591 24PIN..... $425/CALL
OL 410E 600dpi 2MB $529
Doc-it 3000, 300dpi, Laser, Fax, Scanner, Copier $1099
OL400E, 300DPI, 4PPM..... $349*
OL410E/PS, MAC Comp..... $575

HOURS: 9AM - 6PM M-F
10:30AM-4PM SAT

HEWLETT PACKARD *Authorized Dealer*

HP Laserjet 4L w/Toner $749
HP Laserjet 4ML w/Toner $949
HP Laserjet 4P w/Toner $929
HP Laserjet 4MP w/Toner..... $1299
HP Laserjet 4+ w/Toner..... $1569
HP Laserjet 4M+ w/Toner IN STOCK
HP Laserjet 4V w/Toner $1869
HP Laserjet 4MV w/Toner .....NEW
Deskjet 540 ..... $379
Deskjet/Deskwriter 560C $469
Deskjet/Deskwriter 320 Portable. $299
Deskjet 1200C & 1200CPS. IN STOCK
HP ScanJet IICX w/CTRL..... $749*
HP ScanJet IIIP w/CTRL..... $489
NEW **HP OfficeJet** Fax/Copier..... $799

Authorized Dealer

Corporate Accounts, Dealers, Government and School P.O.'s Welcome

CONTACT US THROUGH THE INTERNET:
MICROLEAGUE@DELPHI.COM

ML MICRO LEAGUE INC.

1844 LINCOLN BLVD. (NORTH OF PICO) SANTA MONICA, CA 90404

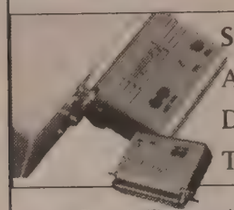
310-450-2708
OUT OF STATE
800-466-2708
FAX (310) 452-1294

Prices Good With This Ad Only. All Prices are Cash/Check Discounted.
*Price after manufacturer's rebate.

SINCE 1989 PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

Apple, the Apple logo, LaserWriter, StyleWriter, Mac & Macintosh are registered trademarks of Apple Computer Inc.

We Fix SCSI Problems And Improve SCSI Performance

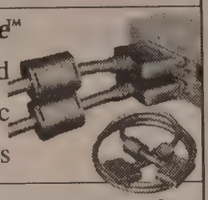


SCSI*Vue*™ Active Diagnostic Terminator

- *Active Termination Increases Reliability*
- *Provides Regulated SCSI Voltage*
- *Automatically Adjusts As SCSI Changes*
- *Matches Cable Impedance Needs*
- *Gold Connectors Reduce Noise*
- *LEDs Diagnose SCSI Problems*

- *Heavy Duty (military type) Cable Construction*
- *Provides Best Impedence Match*
- *Foil, Braid, Ferrite Shielding Reduces Noise*
- *Data Transfers Are Dramatically Improved*
- *LED Provides Diagnostic Ability*
- *Reduces SCSI Retries and SCSI Errors*

SCSI*Vue*™ Gold Diagnostic Cables



The quality of your SCSI Cables and Terminators has a direct effect on the performance and reliability of any SCSI bus. Using inexpensive "PASSIVE TYPE" Terminators and "UN-SHIELDED" Cables can cause many problems. Granite Digital has introduced the **SCSI*Vue*** line of **Active Diagnostic Terminators** and **Gold Diagnostic Cables** to eliminate SCSI problems and to improve SCSI performance.

The **SCSI*Vue* Active Diagnostic Terminator** is not only the best Active Terminator you can find, but also a SCSI analyzer. The **SCSI*Vue* Gold Diagnostic Cables** are exclusively designed to provide the maximum protection available to the SCSI bus.

SCSI *Vue* Terminator
Centronics 50 59
MicroD 50 79
MicroD 68 99
MicroD 68 Diff. 99

Granite D•I•G•I•T•A•L

SCSI *Vue* Gold Cables
25 Apple / 50 Cent.
2'/6' . . . . . 49 / 59
50 / 50 Centronics
18"/3'/6' . . . . 59 / 69 / 79
50 Cent. / 50 MicroD
3'/6' . . . . . 89 / 109
50 / 50 MicroD
18"/3'/6' . . . 79 / 89 / 109
68 / 68 MicroD
18"/3'/6' . 129 / 139 / 159

Quantity & Dealer Discounts Available

SCSI 2

Phone 510-471-6442 *Fax 510-471-6267*
Granite Digital • 3101 Whipple Road • Union City, Ca. 94587

NOVELL CLASSES

Get Long Term Results in the Short Run
Lowest Cost in Southern California

- Certified NetWare Administrator
- Certified NetWare Engineer
- Enterprise Certified NetWare Engineer

✔ Classes Start Weekly
✔ All the Classes You Need for Certification

Now Offering 3.x to 4.x Upgrade Classes

Days, Evenings and Weekends

We Offer

WAVE

- Guaranteed Small Classes
- Experienced Novell Instructors
- Outstanding Books with Videos
- Guaranteed Repeat Policy

Novell Certified NetWare Engineer

Call Today
(714) 257-3095 • (800) 900-8848

VISA MasterCard AMERICAN EXPRESS DISCOVER

SEA

Software Education of America, Inc.
Southern California's Leading Software and Network Training Company
265 S. RANDOLPH AVE. #J190, BREA, CA 92621

MULTIMEDIA 101 *continued...*

not everything that should have happened actually happened—or maybe it did, but so fast that I couldn't catch it all. There are, in fact, so many options to choose from that, in the three minutes or so that each song lasts, you can't really check everything out. The song ends with another short noninteractive sequence and you're returned to the EnterEye.

There are a couple of important features here: One, this is still a plotted linear experience with a beginning and an end that you don't have any control over besides quitting it midway. You can't play it endlessly as you can with either of the songs in *Meet MediaBand.*

Two, this provides a greater degree of repeatability than either of the MediaBand songs, because you have so many more options by being able to use the keyboard as well as the mouse. Additional repeatability is provided by a similiar feature to Canter's "the more you click, the weirder it gets" concept, because some keys do different things at different times in the song, and perhaps on subsequent plays; also, sometimes (but not always) when you leave a song, an additional sequence about that character is triggered. Of course, The Residents and/or Ion claim that this is all simply part of the unpredictable and experimental nature of their world.

There's also a warning sign. Even with all this added complexity and repeatability, the experience is not particularly enthralling for all that long (and this observation is made after discounting aesthetic taste and considering several other similar products). So hitting keys will bring up a graphic or trigger a sound; sometimes you get what you expect and you experience some sense of control (which is, of course, a key issue when you're sitting in front of a computer) and sometimes you'll get something new and hopefully wonderful—but either way you're basically getting canned goods. There's no real feeling of creativity.

NO HOLY GRAIL

Interactive music's theoretical Holy Grail is to provide the user with an experience equivalent in emotional intensity and enjoyment to either listening or playing, but somewhere between doing something and being able to do everything there's an uncomfortable void.

Both *Meet MediaBand* and *Gingerbread Man* are extremely interesting in themselves, and valuable signposts towards an unknown future. However, both are essentially the traditional artists' approach of presenting a vision. I believe that when we say interactive music we mean more than just point-click-and-select, that somehow there's a way to foster more creativity in the user without requiring him or her to be a musical genius but without making "mistakes" impossible—after all, that's how you learn.

The problem with these two CD-ROMs is that once the learning is over, so's a large portion of the enjoyment. I think that what's needed will most likely require more than just a mouse and a QWERTY keyboard (I don't think I mean a MIDI air-guitar either—but certainly some think that's one possibility!). I think it's likely that such a goal requires more of a components approach rather than a titles approach.

As Tim Glaser of SBD Productions put it in one of many conversations about this subject, "What we're looking for is a combination of drum machine, pop single, and rave poster." That's beginning to imply to me that the combination is one you put together yourself from a choice of drum machines, pop singles, and rave posters—all in digital form, of course. If you've sufficient interest, you can already do it in the analog world—DJs and their crews do it all the time. ■

Copyright © 1995 by Jonathan E. All rights reserved.

OVER 600 HUNDRED CD-ROM TITLES ALL AT WHOLESALE PRICES

CLIPART PUBLISHING

Aldus Pagemaker 5	$299
Art Appeal (business)	$15
Art Appeal (education)	$15
Art Appeal (governmnt)	$15
Business Clipart	$11
Clipart Cornecopia	$15
Clipart Heaven 2	$21
Clipart Warehouse	$11
Corel Gallery	$36
Corel Draw 5	$185
Corel Unleashed 5	$37
Fonts Platinnum	$10
Font Heaven	$15
Font Elegance	$14
Full Bloom	$16
Gif Galore	$17
Icons 4000	$19
Image Library	$12
Image Warehouse	$16
Kodak Photo CD	$12
Megaclipart (color)	$29
MS Publisher	$59
Photo Gallery	$15
Publish It 2.0	$15
Publisher Platinum	$12
Publisher Background	$15
Publisher Paradise Pro.	$15
Publisher Premiere Art	$15

EDUCATION

3-D Dinosaur	$19
Animals of San Diego	$12
Arthur Birthday Surp.	$32
Arthur Teacher Trouble	$15
Carmen San Diego	$16
Cat Came Back	$12
Complete Algebra	$15
Creative Writer	$39
Creepy Crawlies	$12
Dinosaur Encyclopedia	$14
Dr. T's Sing Along	$15
Educational Platinum	$10
Fine Artist	$39
Forever Growing Gard.	$15
Guidebook to Math	$12
Jurassic Abc's	$15
Just Grandma & Me	$15
Magic School Bus	$35
Mario's Missing Deluxe	$15
Mario's Time Machine	$15
Mavis Beacon For Kids	$18
Mario's Early Years	$13
McMillan's Dictionary	$15
Merriam Webster Dict.	$15
Middle School	$15
Monkey Bars	$15
Ocean's Below	$15
Oregon Trail	$17
Ozzy World	$19
Play-N-Learn	$12
Power Ranger's	$14
Putt Fun Pack	$13
Putt Putt Moon	$19
Putt Putt Parade	$16
Real World Math	$15
Sitting on The Farm	$12
Space Adventure	$12
Tortoise & Hare	$32
Tuneland	$19
Ugly Duckling	$14
Undersea\Kid's Zoo	$19
Whales	$10
Word Stuff	$15

GAMES

101 Best Games 1	$12
101 Best Games 2	$12
7th Guest	$17
Aces Critical Mission	$12
Aces Over Europe	$22
Aces of the Pacific	$22
Aegis	$24
Alien Logic	$20
Alone in the Dark	$16
Armada	$28
Battle Chess Enhan.	$16
Beneath The Steel Sky	$23
Betrayl At Krondor	$18
Blown Away	$20
Blue Force	$14
Chessmaster 4000 Tur.	$15
Civilization\Mantis	$20
Commanche	$26
Commander Blood	$20
Corridor 7	$18
Cyclones	$20
Critical Path	$15
Cyberace	$15
Dark Legions	$20
Dark Sun 1	$20
Dark Sun 2	$20
Dawn Patrol	$20
Day Of The Tentacle	$19
Desert Strike	$20
Doom 2	$29
Doom 2 Accesory Pack	$17
Doom Explosion	$15
Doom Mania 2	$13
Dracula Unleashed	$20
Dragon Liar	$26
F117A\Red Storm	$15
Fleet Defender	$20
Gaberial Knight	$17
Games Platinum	$10
Goblins 3	$20
Great Naval Battles 2	$20
Gunship 2000	$15
Hell	$25
Hell Cab	$22
Inca 2	$22
Indiana Jones	$17
Iron Helix	$17
Journeyman Turbo	$20
Jutland	$15
Kings Quest 6	$15
Kyrandia Book Two	$24
Lands of Lore	$24
Leisure Suit Larry 6	$22
Lord Of The Rings	$18
Mad Dog 1	$16
Mad Dog 2	$18
Megadoom	$12
Megarace	$15
Menzoberranzan	$20
Monkey Island	$12
MS Golf	$19
Myst	$39
Outpost	$22
Panzer General	$19
Police Quest 4	$22
Protostar	$15
Quantum Gate	$18
Ravenloft	$20
Rebel Assault	$29
Return To Zork	$17
Ringworld	$15
Rise of the Robot	$29
Privateer	$27
Secret Weapons Luft.	$13
Sherlock Holmes 1	$14
Sherlock Holmes 2	$14
Sherlock Holmes 3	$14
Sim City 2000	$20
Star Crusader	$20
Star Trek 25th	$17
Strike Eagle III	$15
Subwar 2050	$22
Terminator Chess	$15
TFX	$24
Tornado	$19
Trump Castle 3	$12
Ultimate Domain	$19
Wolf 3D Mania	$12
Wolf	$17
World Circuit	$15
X-Com	$23

LANGUAGES

Berlitz French	$89
Berlitz German	$89
Berlitz Italian	$89
Berlitz Spanish	$89
Dictionary\Languages	$11
Languages of World	$15
Quick & Easy Spanish	$19
Translator Span.-Eng.	$29
Triple Play English	$19
Triple Play French	$19
Triple Play Spanish	$19

PROGRAMMING

4.4 BSD Lite	$17
Borland Dbase 5.0 Win	$99
BSDISC	$17
Cica 3CD's Dec. 94	$17
C-User's Group Aug 94	$22
Forbidden Subjects 1	$19
Forbidden Subjects 3	$29
Free BSD 2.0	$25
Hacker Chronicles 1	$17
Hacker Chronicles 2	$26
Ham Radio	$11
Ham Radio & Scanner	$12
Hobbes OS\2	$13
Hobbes Ready To Run	$15
Internet Access 1995	$18
Internet Info	$16
Internet Tools	$17
Linux 2.1 3cd's Dec. 94	$20
MPC Wizard	$10
Perl & TCL\TK	$19
Plug-n-Play	$25
PC Technician	$18
QRZ	$13
Simtel 2CD's	$13
Slackware w\manual	$17
Source Code Oct. 94	$17
Standards Nov. 94	$15
Technotools	$11
Usenet Oct. 94	$15
Visual C++ Prof. 1.5	call
Visual Basic Prof. 3.0	$145
Windows NT 3.1	call

REFERENCE

Amer. Talking Dict.	$17
American History	$16
B&H Cookbook	$13
B&H Gardening	$15
CIA Paper's	$11
Complete Legal Guide	$11
Compton's 95' Ency.	$25
Cookbook Heaven 2	$14
Family Dr. 3rd	$15
Groiler's 95	$24
Haldeman's Diary	$15
Hard Days Night	$18
Healing Food Ckbook	$16
Home Medical Advisor	$14
Home Remedies	$13
Infopedia	$27
Learning Windows 3.1	$15
Library Of The Fut. 2nd	$20
Map-N-Go	$36
Mavis Beacon Typing 3	$19
Mayo Family Health	$15
Mayo Pharmacist	$20
Mayo Sports & Fitness	$20
Mayo Total Heart	$20
Movie Select	$14
MS Ancient Lands	$30
MS Bookshelf 94'	$32
MS Complete Baseball	$30
MS Comp. Basketball	$39
MS Cinemania 95	$39
MS Dang. Creatures	$25
MS Dinosaurs	$29
MS Encarta 95	$39
MS Excel 5.0	call
MS Office 4.2	call
MS Office 4.3	call
MS Word 6.0	call
MS Works 3.0	$30
Parenting	$15
Reference Library	$15
Resume Maker	$15
Phone Disc Reverse	$144
Project Guttenberg	$16
Select Phone former	$55
Select Phone current	$140
Shakespeare	$15
Street Atlas	$69
Triple AAA Trip Planer	$20
USA Unzipped	$18
US Atlas\Automap	$15
US History	$15
World Atlas 5	$15

RELIGION

Bibles and Relgions	$11
Bible Heaven	$15
Bible Lands\ Stories	$13
Bible Library 1.1a	$18
Holy Bible 1994	$17
Mulimedia Family Bible	$17

SOUNDS AND MUSIC

Beethoven's 5th	$16
Encyclopedia Sound 1	$11
Encyclopedia Sound 2	$11
Midi Master Collection	$11
Midi Music Shop Pro.	$15
Mozart	$13
MS Beethoven	$39
MS Mozart	$39
MS Musical Instrument	$21
MS Schubert	$39
MS Strauss	$39
MS Stravinsky	$39
Music Magic Songbook	$14
Music Workshop	$16
Sound Wav	$15
Win CD Mat	$12

SHAREWARE

Night Owl 14	$22
Pier 5	$20
Ruby Collection	$15
Shareware Extrag. 4cd	$24
Shareware Overload	$17
Shareware To Max 6cd	$19

SPACE

Destination Mars	$16
Our Solar System	$11
Red Shift	$45
Return To The Moon	$17
Solar Heaven	$14
Space Adventure	$12
Space & Astronomy	$15

ADULT MOVIES\PHOTOS

Anal Queens	$20
Asian Palette	$22
Dirt Duo 2CD's	$20
FAO 1	$19
FAO 2	$19
Jiggly Queens	$18
Kelly 18	$18
Pink Journey	$15
Wet Nurses	$18
Wild Desire	$15

ADULT GAMES

Dream Machine	$37
Night Watch	$30
Night Watch 2	$30
Peepshow	$36
Seymour Butts	$37
Seymour Butts 2	$39
Space Sirens	$38
Virtual Vixens	$34

MAILORDER TODAY!!! 5 CADDY'S $16.99 5 JEWEL CASES $1.99

Platinum Series

YOUR CHOICE $9.99

PRESENT THIS COUPON AND RECIEVE ANY OF THESE TITLES $9.99

Fonts Platinum: Is a collection of the best fonts, font utilities, and publishing programs for Windows, assembled on CD-ROM. More than 1,500 TrueType fonts, divided into categories of Normal, Script, Decorative, and Picture fonts.

Educational Platinum: Contains programs for everyone in your family, from young children who are learning fundamentals such as shapes, colors, and numbers to school age kids learning mathematics and chemistry.. to adults who are mastering basic life skills such as cooking and engine maintainance.

Games Platinum: Is a collection of the best games for Windows with an easy to use interface. You can run all games from CD-ROM before you install them. Arcade Games, Card & dice, Puzzles, Board & Strategy.

Home & Business Platinum: Is a collection of best productivity tools and applications assembled on CD-ROM. Contains 100's of useful programs easy divided into 6 categories. databases, business tools, business finance, home management, home finance, personal management programs.

Multimedia Platinum: A collection of multimedia clips, tools ,utilities for Windows. Contains more than 680 megabytes of multimedia clips tools including full color bmp images , sound files, video clips , icons and animation.

Publisher Platinum: Is a collection of best clipart, fonts, and publishing tools for Microsoft Windows. 5000 Clipart, 100's of Fonts, utilities.

Utilities Platinum: Six categories of utilities, desktop file tools, Editor tools, Viewers, Windows Manager, and other utilities.

Win Platinum: Contains all the Windows programs you could possibly think of. It has a variety of drivers, fonts, games, utilities, etc. Just to many megabytes to list.

Chestnut Titles

YOUR CHOICE $9.99

PRESENT THIS COUPON AND RECIEVE ANY OF THESE TITLES $9.99

NEW TITLES	Clipart Warehouse	MVP's Game Jamboree
Business Clipart	Multimedia Mania	Encyclopedia of Sound 1
Circle of Knowledge Ency.	Our Solar System	Encyclopedia Sound 2
Fate of the Starlords	Personal Finance	**CHESTNUT VIDEO CD-ROM's**
SHAREWARE	Sound Sensations	TV Commercials of the 50' 60's
Bibles & Religion	Technotools	Porky Pig
Complete Bookshop	Windoware	Charlie Chaplin
Computer Reference Library	**CHESTNUT NEW MEDIA**	Flashcards on Video
Dictionaries and Languages	Insane Impersonations	Classic Cartoons
Deathstar Arcade Battles	Home & Office Legal Guide	Bugs Bunny
Gardening	HIV\AIDS Resource Guide	Night of the Living Dead
HAM Radio	Midi Master Collection	Betty Boop
Hugo's House of Horrors	The CIA Papers	Caricaturas Classicas
Shareware Trio Overload	World Traveler 1	Sports Bloopers

THINK & TALK

BERLITZ

SPECIAL $89.99

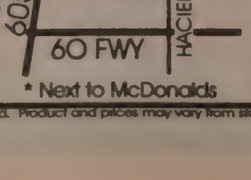
GERMAN (9CD's) ITALIAN (7CD's)

SPANISH (8CD's) FRENCH (7CD's)

GET THE SAME LOW PRICES AT OUR STORE AS AT THE TRADESHOWS

GALE PLAZA

15606 Gale Ave. #F
Hac. Hghts. Ca. 91745
Tel: 818-336-8922
Fax: 818-336-8922



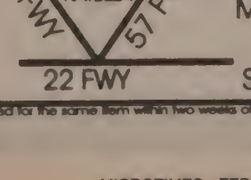
* Next to McDonalds

STYLIN Multimedia

Were Open:
Mon 11-6
Tue-Fri 10-7
Sat-Sun 10-4

N. Stadium Bus. Cntr.

2120 Howell Ave. #404
Anaheim, Ca 92806
Tel: 714-634-38CD
Fax: 714-634-0117



JUST CD'S

Were Open:
Mon- Fri 9-5
Sat 10-2
Sun Closed

Each store is independently owned and operated. Product and prices may vary from store to store. All sales are final except for defective merchandise that will be exchanged for the same item within two weeks of the date of purchase.

MacroSystem Development's WarpEngine:

New Life For A3000s, More Speed For A4000s

Now you can breathe new life into your aging Amiga 3000 or put some added spunk into your Amiga 4000. Better hard disk performance, greater computing power, straightforward installation, and solid design—you get it all from MacroSystem Development's WarpEngine.

MacroSystem is shipping accelerator boards in various configurations for both the Amiga 4000 and 3000, with built-in SCSI-2 Fast DMA controllers. The high-end versions sport 40MHz '040 CPUs, while the low-end model for the A4000 allows you to transplant your existing 25MHz '040 chip and RAM to the WarpEngine for up to a 100% speed increase. (Note: There is no CPU-less version for the A3000.) A4000 WarpEngines can hold up to 128MB of RAM (using 32MB SIMMs) while the A3000 versions top out at 64MB.

Because the SCSI controller is mounted directly on the board, you don't have to worry about any Buster chip problems or incompatibilities like you do with Zorro III expansion card alternatives. Also, it doesn't occupy a Zorro slot and is much faster than any expansion-bus card.

WARPING AN A4000

The A4000 installation instructions are very good; I had the accelerator portion of the WarpEngine up and running in about a half hour.

The hardest part of the installation was removing the plastic faceplate from the case. Commodore did a nice job with the drive subassemblies (much better than on the 3000), but the faceplate is held by several snaps which are difficult to undo without breaking them. (Make sure you take the appropriate anti-static precautions when working inside your machine.) A nice thing about the A4000 WarpEngine setup is you can add RAM and change jumpers after the board is installed.

Better hard disk performance, greater computing power, straightforward installation, and solid design—you get it all from WarpEngine.

To test the board I got a 32MB SIMM from H. Co. Computer Products. (Incidentally, Lawrence Burkey at the company was exceptionally helpful and knowledgeable in finding the chip I needed for the WarpEngine.) The WarpEngine is optimized for 60ns RAM, although you can use 70 or 80ns chips, or even move existing motherboard RAM, with a decline in performance. There are four SIMM sockets which can hold a mixture of 4, 8, 16, or 32MB SIMMs. (Note: Ignore the instruction to rotate the SIMM "towards you." In fact, you have to rotate it away from you.)

The manual has a great suggestion: to move the A4000's IDE drive to the unused space just below the floppy drive. This allowed me to put a half-height 3.5" 1GB drive in its place. (Normally there is only enough room to add a low-profile [1" high] 3.5" drive in that spot.) This left the 5.25" drive bay open for future use.

You should definitely follow the manual's advice to place the four plastic standoffs in the motherboard first, when installing the WarpEngine. I also found that it helps to pinch the tips of the standoffs with a pair of pliers to make it easier to snap the board in place.

WARPING AN A3000

Aside from the lack of the AGA chipset, I often prefer to use my A3000 over my A4000. I give up a lot of speed, but I like the deinterlaced display and the on-board SCSI controller. Well, with MacroSystem Development's 40MHz '040-based WarpEngine for the A3000, I no longer have to give up speed.

BY DOUGLAS J NAKAKIHARA

Computers & Technology

1751 Artesia Blvd. #B
Manhattan Beach
CA 90266
Phone: (310) 798-7332
Fax: (310) 798-8939

Manhattan Beach

Business Hours: Mon–Fri 9 a.m. to 6 p.m.
Sat–Sun 10 a.m. to 4 p.m.

All systems come with a one year warranty, extended support and service option is available on request.

Multimedia Kit

Double Speed CD ROM, 16 Bit Sound Card, Joystick, 4+4 Watts Speakers, 1 Game + 6 CD Title. ..... **Only $219.00**
Sound Blaster Discovery 16 ..... $239.00

CD ROM & SOUND CARDS

Sony CD Double Speed $120.00
Panasonic CD Double Speed $135.00
Quad Speed 4x, IDE $265.00
Sound Blaster 16 MCD $109.00
Sound Blaster 16 SCSI $149.00
Sound Blaster AWE/32 ..... $269.00
Sound Blaster 32 ..... $265.00

Network Cards

16Bit 2in1 NE-2000 Comp ..... $ 39.00
16Bit NE-2000 PCMCIA $189.00
32Bit 3in1 VLB w/driver $199.00

Monitors

12" Monchorome T.TI ..... $ 89.00
12" Monchorome VGA $119.00
14" VGA Color $169.00
14" SVGA .39 1024x768 ..... $189.00
14" SVGA .28 NI 1024x768 ..... $209.00
15" SVGA .28 NI 1280x1024 ..... $276.00
17" SVGA .28 NI 1280x1024 ..... $568.00
17" SVGA .28 1680x1280 ..... $689.00

Viewsonic Monitors

V4E 14"SVGA .28 NI $252.00
V15E 15" .28 Ni Green $345.00
V15 15" .27 NI 1 280X1024 ..... $425.00
V17E 17".28 NI $689.00
V17 17" .27 NI 1600X1280 ..... $889.00

NEC

NEC 3FG 15" $399.00
NEC 3FGE 15" $449.00
NEC 4FGE 15" $499.00
NEC 5FG 17" $999.00

Hard Drives

260 MB IDE $159.00
405 MB IDE $179.00
420 MB IDE $183.00
540 MB IDE $205.00
540 MB IDE MAXTOR $215.00
540 MB SCSI QUANTUM $245.00
700 MB IDE $289.00
1.0 GB W.D. IDE $439.00
1.0 GB CONNER SCSI $439.00
1.0 GB QUANTUM $525.00

Fax/Modems

9600/2400 Fax Modem ..... $ 28.00
14400 Fax Modem ..... $ 57.00
14400 Fax/Modem/Voicemail ..... $ 95.00
14400 Fax Modem (External by Calcom) $139.00
28.8 Fax/Modem Internal $135.00

486 DX2-66 Computer

with Multimedia Super Package
UL & FCC Class 2 Approved.

ONLY $1269

3 years labor & 1 year parts warranty

- 486 DX2-66 VLB Intel CPU with 256 cache
- Pentium Over Drive ready Zif Socket
- 420 MB IDE HD
- 1.44 MB FD
- 4MB RAM
- SVGA NI .28 14" Color Monitor
- Mouse
- 101 Keyboard
- Double Speed Multi-Session CD ROM
- 6-CD Titles including Encyclopedia
- VLB I/O IDE Card 2HD, 2FDD, 2S, 1P, 1G
- SVGA VLB 1MB Card 1024x768

Mother Boards with CPU & Cache

ISA 386-SX40 ..... $ 59.00
ISA 386-DX40 128K Cache ..... $ 95.00
ISA 486-33 TI CPU OK Cache ..... $ 95.00
ISA 486-DLC 40 Mhz, 128K Cache $165.00
VLB 486-DLC 40 Mhz w/NPU 128 Cache $189.00
VLB 486-DX40 Mhz, 256K Cache $239.00
VLB 486-DX 33 Mhz Intel CPU, 256K Cache $248.00
VLB 486-DX2-66 Mhz Intel CPU, 256K Cache $279.00
VLB 486-SX25 Mhz Intel CPU, OK Cache $155.00
VLB 486-SX33 Mhz Intel CPU, OK Cache $179.00
VLB/PCI 486-DX2-66 Intel CPU, 256K Cache $335.00

Pentium System Boards	w/CPU	w/o CPU
586-60 Intel, 4 PCI, 256K	$ 638.00	$229.00
586-66 Intel, 4 PCI, 256K	$ 698.00	$229.00
586-90 3-PCI, OPTI AMI, 256K	$829.00	$249.00

IBM System Boards w/CPU & NPU

IBM 486SLC2-66, VESA, OPTI, 64K $219.00
IBM 486SLC2-66, ISA, OPTI, 64K $199.00

Simms & Memeory

256K Simms 80ns ..... $ 11.00
1Meg Simms 70ns 1x3 ..... $ 37.00
1Meg Simms 70ns 1x2 ..... $ 35.00
4Meg Simms 70ns 1x9 ..... $149.00
1Meg Simms 70ns 72pin ..... $ 52.00
1Meg Sipps 70ns 30pin ..... $ 39.00
2Meg Simms 70ns 72pin ..... $ 89.00
4Meg Simms 70ns 72pin $149.00
8Meg Simms 70ns 72pin $279.00
16Meg Simms 70ns $495.00

Printers

HP540 ..... $ 272.00
HP560C ..... $ 469.00
HP4P ..... $ 915.00
HP4Plus $1359.00
HP4L ..... $ 619.00
Oki 400 ..... $415.00
Oki 400E $510.00
Panasonic P1150 ..... $129.00
Epson Stylus 800 ..... $255.00
Canon BJC-600 ..... $529.00

Please call for latest prices.

CPU

586-90 Intel $589.00
586-66 Intel $494.00
586-60 Intel $413.00
486DX4-100 Intel $495.00
486DX2-66 Intel $189.00
486-DX33 Intel $149.00
486-SX33 Intel ..... $ 85.00
486-DX33 Cyrex $138.00

Accessories

Mini Tower Case w/ps ..... $ 37.00
Mid Tower Case w/ps ..... $ 54.00
Desktop Case w/ps ..... $ 46.00
Full Tower Case w/ps ..... $ 70.00
Key Board 101 BTC ..... $ 17.00
Key Board Focus 2001 ..... $ 39.00
Key Board Focus 8000 ..... $ 45.00
Mouse Generic ..... $ 9.00
Microsoft Mouse 2 button ..... $ 39.00
1.2 MB FD 5" ..... $ 45.00
1.44 MB FD 3" ..... $ 39.00
120 MB Tape Backup $129.00
250 MB Tape Backup $149.00

I/O Cards

16Bit 2S,1P,1G ..... $ 13.00
16Bit 2S,1P,1G,2HD,2FD ..... $ 16.00
VLB 2S,1P,1G,2HD,2FD ..... $ 23.00
PCI SCSI CARD $99.00
VLB 6360 Adaptec SCSI ..... $ 99.00
VLB AT I/O&IDE 4+4 Suprt 2.88 HI/Spd ..... $ 55.00
VLB AT I/O&IDE w/OK Cache Promise $149.00
PCI I/O IDE Card ..... $ 39.00
PCI IDE Card ..... $ 29.00
VLB Caching Controller $137.00
Intel PCI IDE Card With Cable ..... $ 39.00

Video Cards

ISA VGA 256k Video Card $29.00
ISA VGA 512k Video Card $39.00
ISA VGA 1MB Video Card $59.00
VLB SVGA 1MB 1024x768 ..... $69.00
VLB SVGA S3 CHIP 1024x768 ..... $85.00
PCI/VLB Diamond Stealth 64bit/2MB DRAM $185
PCI/VLB Diamond Stealth 64bit/2MB VRAM $279
Diamond Viper SE VLB /2MB VRAM $299
PCI/VLB Kelvin 64 Orchid /1MB $139
PCI/VLB Pro Turbo /2MB VRAM $286
PCI/VLB Pro Turbo /4MB VRAM $489
PCI/VLB Graphics Ultra Pro /2MB VRAM $250

MasterCard VISA

Financing is Available. (OAC)
All Prices are Cash/Check

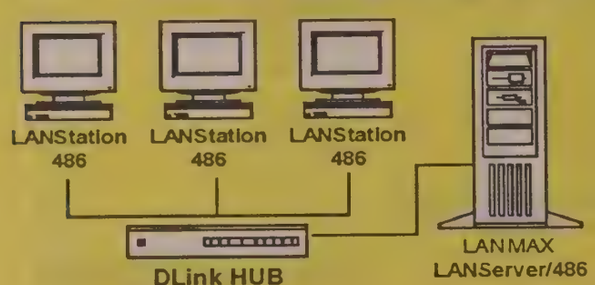
*Prices subject to change without notice. Not Responsible for typos. All product names are trademark of their respective companies.

Wouldn't it be great if Networking was as simple as plugging in a phone...

USM Introduces LAN*Max* Network-ready Systems

LanMax Network-ready Systems are a unique solution to the Networking Problem. LanMax Networks are shipped Ready-to-Run, simply plug in the provided cables and you're ready to get to work! LanMax Systems are pre-tested, ensuring that every component is working and compatible. With the LanMax Modular Design, your Network can be easily upgraded and expanded as your business grows. USM is your LanMax Authorized Distributor, call USM today for all of your Networking needs.

Basic 3-Station Complete Network



3 - LANStation/486DX-33 including:
- 4MB RAM
- Slimline Case
- TEAC 1.44 Floppy Drive
- Network Boot Diskette
- D'Link Ethernet Network Card
- 14" Super-VGA Color Monitor
- 2 Serial, 1 Parallel port
- 25' Ready-to-Plug Network Cable

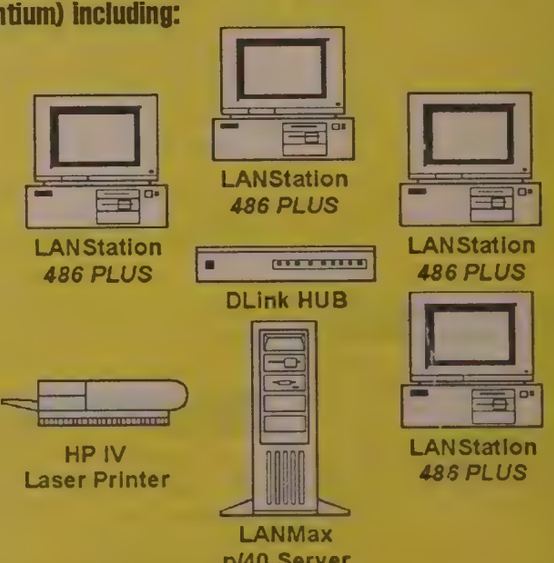
1 - LANServer/486DX2-66 including:
- 8MB RAM
- Buffered Controller (VLB)
- Full Tower Case
- TEAC 1.44 Floppy Drive
- 540MB Hard Disk Drive
- D'Link Mini HUB
- ULTRA Server Operating System
- 5 Station Network License

$6995

Advanced 4-Station Complete Network

4 - LANStation/486DX2-66 Plus including:
- 4MB RAM
- Desktop Case
- Local Bus Controller card
- TEAC 1.44 Floppy Drive
- 420MB Hard Disk Drive
- D'Link Ethernet Network Card
- 14" Super-VGA Color Monitor
- 2 Serial, 1 Parallel port
- 25' Ready-to-Plug Network Cable
- 5 Station Network License

1 - LANServer p/40 (90MHz Pentium) including:
- 16MB RAM
- Fast Caching Controller with 4MB
- Full Tower Case
- TEAC 1.2 and 1.44 Floppy Drives
- 850MB Hard Disk Drive
- D'Link 12-port Stackable HUB
- ULTRA Server Operating System
- 14.4 Baud Modem
- 350MB Tape Backup
- 14" Super VGA Color Monitor



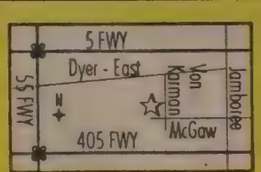
1 - Hewlett Packard LaserJet 4 Printer

$13995

Network Operating System Pre-Installed and Tested.
All Cables, Connectors, Documentation, Etc. included!
On-Site Installation and Service Contracts are available.

USMACH

USM Irvine
Your LAN*Max*
Authorized
Distributor



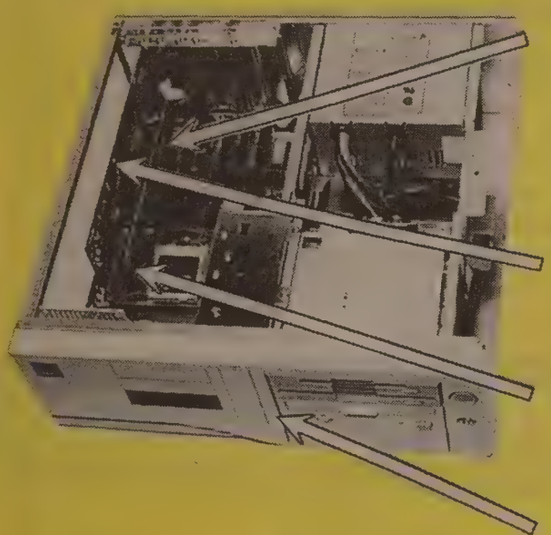
17145 Von Karman Ave Ste 109
(714) 252-8335
FAX (714) 252-8354
Hours: M-F 9-6 Sat. 10-3

Other Locations to serve you!
USM Sunnyvale - (408) 738-8291
USM Fremont - (510) 623-9040
USM San Francisco - (415) 952-5885

Since 1983

The USM Way...
High Quality, Superior Service and Low Prices!

USMach 486 Computers Stand Above The Rest
(Just a few of the many reasons why...)



USMach 486	"The Rest"
American 486 Mainboard with 2 year warranty 8 slots - 3 VESA Local Bus, 5 ISA slots 5-year Lithium CMOS Battery 2 Bus Mastering slots for faster performance SIS Chipset - the fastest VESA chipset AMI WinBIOS - The World Leader Supports large IDE drives (540MB+) Energy Star Compliant, Anti-virus boot protection Landmark 2.0 - 223	**No-name 486 Mainboard with 1 year warranty** 7 slots - 3 VESA Local Bus, 3 ISA slots, 1 8-bit 1-2 year NiCad CMOS Battery No Bus Mastering slots OPTi, Hint, FOREX Chipset - slower performance Award, Mr. BIOS - no track record Supports only up to 540MB hard drives Not Energy Star Compliant without Virus protection Landmark 2.0 - approx. 200
Eagleview 1MB Graphics Adapter - Made in USA C&T Chipset with 128K (256K max) Video Cache Video Caching is the latest Graphics Breakthrough Twice as fast as Generic cards!! (Landmark - 13.2) 2 year warranty	**Generic 1MB Graphics Adapter - Made in Taiwan** Trident Chipset - mediocre performance Does not support Video Caching Reasonable Windows performance (Landmark - 6.5) 1 year warranty
Eagleport Enhanced IDE Controller - Made in USA Supports 1.2, 1.44 and 2.88MB Floppies Up to 21X faster than generic cards!! (Coretest - 261) Fast 16550 Serial Ports, Enhanced Parallel Port 2 year warranty	**Generic Standard IDE Controller - Made in Taiwan** Supports 1.2, 1.44 Floppies only Average Access Rate and Throughput (Coretest - 12) Standard Serial Ports, Standard Parallel Port 1 year warranty
Majesty Desktop Case with 7 Drive Bays 1.2 Guage Triple Zinc plated Steel 250Watt UL Approved Power Supply	**Generic Desktop case with 5-6 drive bays** 1.0 or less Guage Single Zinc plated Steel 200-230Watt Non UL Approved Power Supply

USMach 486DX2-66 Complete System* Only $1145!

*Mach V 486DX2-66 VESA Local Bus with 256K Cache, 4MB 70ns RAM (64 MB Maximum), Desktop Case, Full Size 101 Keyboard, 420MB Hard Drive, 1.44MB Floppy drive, Eagleport controller, Eagleview Video card, 14" SVGA .28mm Non Interlaced monitor

Custom Configurations and Expert Installation available. Call today, or come by our convenient Irvine Showroom to experience the USM difference!

USMach Pentium 90 Only $1945*

*Intel Pentium CPU, PCI Mainboard with 256K Cache, 8MB 70ns RAM (128MB Maximum), Mini tower Case, Full Size 101 Keyboard, 540MB Hard Drive, 1.44MB Floppy drive, Enhanced IDE Controller (4 HDD), 1MB PCI Video card, 14" SVGA .28mm Non Interlaced monitor

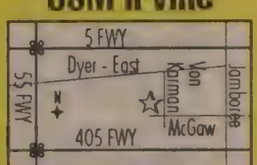
USMach Pentium 66 Only $1745*

USM
USMACH

Visa and Mastercard accepted. No surcharge for credit cards.
Price and availability subject to change without notice.
Prices effective through 2/28/95.

Corporate and Government POs are welcome!
90-days Same as Cash Financing is also available!
(OAC)

USM Irvine



17145 Von Karman Ave Ste 109
(714) 252-8335
FAX (714) 252-8354
Hours M-F 9-6 Sat. 10-3

Other Locations to serve you!
USM Sunnyvale - (408) 738-8291
USM Fremont - (510) 623-9040
USM San Francisco - (415) 952-5885

Since 1983

AMIGA *continued...*

Installing the A3000 version is a little more complex. First off, an '040 will not run in an Amiga without Kickstart ROMs. My early Amiga 3000 (circa June 1990) shipped with Kickstart stored as a file on the hard disk. As a result, I first had to install ROMs—I used 3.1 ROMs available from MacroSystem Development. The procedure is a little tricky because the existing ROMs are mounted upside down on a small daughtercard (sometimes called the "ROM Tower") that plugs into the motherboard. You have to remove this, replace the ROMs with the new ones, and plug it back in. You might have to cut through some white plastic straps too. It helps to mark the orientation of the daughtercard and ROMs with a black marker before you remove them.

Although the 3000's design requires you to totally dismantle the machine, everything worked perfectly the first time and I was able to update all of the system files without incident. (If you are upgrading from 2.x AmigaDOS, delete all of the files in the ENVARC:sys directory. Version 3.1 apparently uses different file formats for the system preferences and it won't automatically convert them. You'll then have to reboot and reconfigure all of your system preferences, like fonts, Workbench screenmode, etc.)

The WarpEngine installation instructions come in the form of a three-page addendum. The same SIMM rotation mistake as in the 4000 installation also appears here. The instructions don't say you need to, but you could anchor the WarpEngine with screws using the metal standoffs on either side of the CPU connector already on the 3000's motherboard. (At least mine had them.) Be careful though, I tightened a screw too much and broke off one metal standoff.

There are a couple jumpers on the A3000 motherboard that need to be changed, and a jumper clip must be placed on a pin on a CIA chip. The instructions presume you will know where pin twenty-one is, so for those of you who may not know (like I didn't), here's how you figure it out. The chip will have a round dimple on one end. The pin immediately to the left is pin one. Continuing counterclockwise around the chip, you count up to twenty-one. If you are standing in front of the case looking in, the pin is in the top right-hand corner.

The A3000 WarpEngine is basically identical to the A4000; however, as mentioned before, the maximum amount of RAM for the A3000 version is 64MB. As such, there are only two SIMM sockets, where there are four on the A4000 board.

The A4000 WarpEngine performed two to three times faster than a stock A4000, while the A3000 version gives a stock 3000 nearly eight times the performance! Aside from rendering-time benefits, your overall system will be snappier.

NO ROOM TO SPARE

There is not much room in the A3000, so make sure the WarpEngine is plugged in all the way and does

BAR CODE IS OUR SPECIALTY

INPUT AUTOMATION, INC.

The single source for all your bar code system needs: hardware, software, consulting and system design. Our philosophy is based on two principles: high-quality industrial products, and the best technical support available.

DESIGN AND CONSULTING

To create your optimal solution, an Input Automation consultant will design a complete system, and then recommend equipment that fills your exact needs.

We will not be satisfied until our bar code system meets your demanding standards.

Call today for free info.& product information

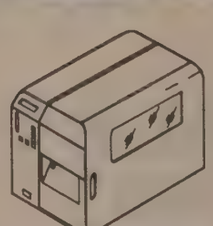
(Dealer inquiries welcome)

Call for an appointment to see our Showroom

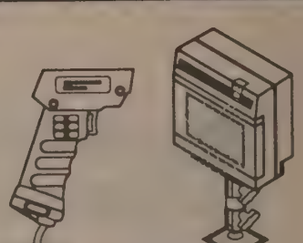
Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849
Tel: (714) 374-4511

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

INPUT automation, inc.
Authorized Value-Added Distributor

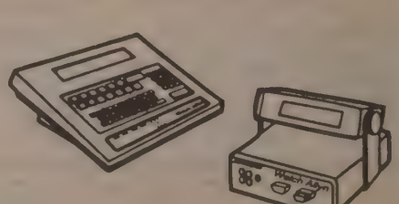


Bar Code Label Printers, Software, and Supplies



Laser Scanners. Omnidirectional, hand-held/hands-free, fixed mount.

Portable Data Collection Terminals



Welch Allyn bar code readers/scanners. Over 15 years leadership in bar code manufacturing.

Visa & M/C Accepted

© 1992 Copyright Input Automation, Inc. All rights reserved. All product names mentioned are trademarks of their respective manufacturers. Input Automation, Inc. recognizes these trademarks

PERFORMANCE AND PRICE...

WE WILL MATCH ANY REASONABLE PRICE!

PCI/VLB

486DX4-100MHz PCI/VLB 256K C. w/420MB	$1197
486DX2-80MHz PCI/VLB 256K C. w/420MB	$947
486DX2-66MHz PCI/VLB 256K C. w/420MB	$907
486DX2-50MHz PCI/VLB 256K C. w/420MB	$857
486DX-33MHz PCI/VLB 256K C. w/420MB	$857

EISA/VLB

486DX2-80MHz EISA/VLB 256K C. w/420MB	$987
486DX2 66MHz EISA/VLB 256HC.w/420MB	$957
486DX2-50MHz EISA/VLB 256K C.w/420MB	$897

VESA/LB

Green PC 486DX4-100MHz VLB 256K C. w/420MB	$1187
Green PC 486DX2-80MHz VLB 256K C. w/420MB	$917
Green PC 486DX2-66MHz VLB 256K C. w/420MB	$891
Green PC 486DX2-50MHz VLB 256K C. w/420MB	$837
486DX2-66MHz VESA LB 128K C. w/420MB	$867
486DX2-50MHz VESA LB 128K C. w/420MB	$827
486DX-33MHz VESA LB 128K C. w/420MB	$827
486SX-33MHz VESA LB 128K C. w/420MB	$817

• BARE BONE SYSTEMS •

Includes: Mini Tower, IDE Controller, 2S/1P/1G, Keyboard

486DX4-100MHz 256K C. VLB w/1MB RAM	'677
486DX2-80MHz 256K C. VLB w/1MB RAM	397
486SLC-75MHz 256K C. VLB w/1MB RAM	327
486SLC-66MHz 64K C. VLB w/1MB RAM	279
486DX2-66MHz 256K C. VLB w/1MB RAM	345
486DX2-50MHz 256K C. VLB w/1MB RAM	287
486DX-33MHz 256K C. VLB w/1MB RAM	287
486DX2-66MHz 256K C. PCI w/1MB RAM	377
486DX2-50MHz 256K C. PCI w/1MB RAM	325
486DX-33MHz 256K. C PCI w/1MB RAM	325

PENTIUM MULTIMEDIA

Pentium 90MHz PCI/VLB 256K C.	$2387
Pentium 66MHz PCI/VLB256K C.	$2137
Pentium 60MHz PCI/VLB256K C.	$2117
Pentium 66MHz PCI/ISA 256K C.	$1997
Pentium 60MHz PCI/ISA 256K C.	$1977

Full Twr. Case w/10B Dr. Bays, 16MB RAM, 64 bit 1MB PCI Video, PCI Cntrl., 1.4 MB FD, 540MB IDE, 15" Shamrock NI Mntr., Dble. Speed CD-Rom, 16bit Snd. Card, Speakers, Microsoft Serial Mouse.

486DX MULTIMEDIA

486DX2-80MHz VLB 256K C. w/420MB	$1417
486DX2-66MHz VLB 256K C. w/420MB	$1377
486DX2-50MHz VLB 256K C. w/420MB	$1318

8MB Installed, S3 32Bit 1MB Video, 32Bit Enhncd. IDE Ctrl., 1.4M FD, 15" L/R .28 NI Mntr., 2x Speed CD ROM, Snd. Card, Spkrs.

SLC/VLB

486SLC-75MHz VLB 256K C. w/270MB	$807
486SLC-66MHz VLB 64K C. w/270MB	$767
486SLC-33MHz ISA w/270MB	$677

ISA/DLC

486DLC-40MHz VLB w/270MB	$761
486DLC-40MHz ISA w/270MB	$738
386DX-40MHz ISA w/270MB	$700
386DX-33MHz ISA w/270MB	$667

• NETWORK •

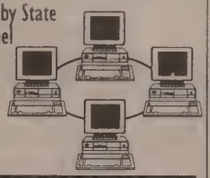
NETWORK PRODUCTS

Are You Planning a New Network?
Are You Upgrading a Current Network?
Want to Add Windows for Workgroups?
Find Out the Hidden Costs of Upgrading!
Get These and Other Questions Answered By Our Network Staff!

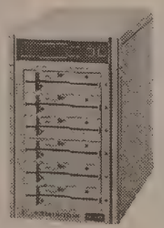
Ethernet NE2000 Coax Card	$49
Ethernet NE2000 10 Base-T, Twisted Pair	49
Novell NE2100 Bus Master NIC (10 Base-2 (BNC)/10 Base-5 (AUI))	49
Lantastic A15.0 Single For Windows/DOS	88
Concentrator, UPS, LANSoftware	CALL

COMPLETE NETWORK SOLUTIONS

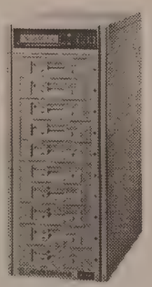
- Service & Support
- Installation Done by State Licensed Personnel
- FREE Estimate
- Novell Engineer
- Reference on Demand
- Demo Available



• THE SUPER COPYSTAR • DISKETTE DUPLICATORS/ FORMATTERS



DC-506/DC-506H
5.25" TARGET FDDx6



DC-3010/DC-3010H
3.5" TARGET FDDx10

FUNCTIONS:

- Copy • Brief Copy • Loading Copy • Format • Compare
- Verify • Head Cleaning • Head Alignment • Set Track No.
- Set Re-Try No. • Write-Protection Override
- Power-On Self-Test • Master Drive Selectable

AUTOLOADER AVAILABLE!

ADC-3015 (Standalone) • ADC-3015N (Network)

CALL FOR MORE DETAILS!

• MONITORS •

Edition 14" Amber	'89
Edition 14" White	89
14" SVGA .39dp 1024x768	187
14" 1024x768 .28dp Interlaced	195
Shamrock 14" (1024x768) .28DPI N-I	225
Shamrock 15" (1280x1024) .28DPI N-I	317
Optiquest 15" 1280x1024 .28dp N-I	307
Sceptre CD-615GL 15" Energy .28dp N.I.	355
Optiquest 17" 1280x1024 .26dp N-I.	579
Shamrock 20" 1280x1024 .28dp N.I.	1179

• MOTHERBOARDS •

CPU Pentium 60/66/90MHz, 4DX2-66/50/33MHz	'CALL
Intel Pentium/PCI 90/100MHz 256K C. w/IDE	325
Intel Pentium/PCI 60/66MHz NCR SCSI 256K C	255
Intel Pentium/PCI 60/66MHz 256K C.	218
OPTI Pentium PCI/VLB 90/100MHz 256K C.	250
OPTI Pentium PCI/VLB 60/66MHz 256K C.	217
OPTI Pentium VLB/ISA 60/66MHz 256K C.	197
486DX/66/75/100MHz PCI/VLB 256K C.	125
486DX/33/40/50/66MHz EISA/VLB 256K C.	157
486DX/33/40/50/66MHz VLB 256K C.	87
Green PC 486DX/33/40/50/66MHz VLB 256K C.	97
Intel Pentium/PCI 256K C. w/IDE/I/O P90MHz CPU	937
Intel Pentium/PCI 256K C. w/P66MHz CPU	638
OPTI Pentium PCI/VLB 256K C. w/P90MHz CPU	837
OPTI Pentium PCI/VLB 256K C. w/P66MHz CPU	617
OPTI Pentium PCI/VLB 256K C. w/P60MHz CPU	587
Pentium PCI/ISA 256K C. w/16MB RAM w/o CPU	617
Green PC VLB 486DX4-100MHz 256K C. w/CPU	567
Green PC VLB 486DX2-80MHz 256K C. w/CPU	297
Green PC VLB 486DX2-66MHz 256K C. w/CPU	287
Green PC VLB 486DX2-50MHz 256K C. w/CPU	199
VEGA Green PC VLB 486DX/100/66/50/33MHz 256K C.	159
VEGA Green PC VLB 486DX2-66MHz 256K C w/CPU	327
VEGA Green PC VLB 486DX-50MHz 256K C w/CPU	317
VEGA Green PC VLB 486DX-33MHz 256K C w/CPU	277
PCI/VLB Green PC 486DX2-50MHz w/CPU 256K C	227
PCI/VLB Green PC 486DX2-66MHz w/CPU 256K C	287
PCI/VLB Green PC 486DX2-80MHz w/CPU	327
PCI/VLB Green PC 486DX4-100MHz w/CPU 256K C.	597
EISA/VLB 486DX2-66MHz CPU 256K C.	317
EISA/VLB 486DX2-50MHz CPU 256K C.	257
YESA LB 486DX2-66MHz 256K C. w/4MB RAM	387
YESA LB 486DX2-50MHz 256K C. w/4MB RAM	327
IBM 486SLC2-75MHz VLB 256K C. w/PS Socket	237
IBM 486SLC2-66MHz VLB 64K Ext. w/Math Co	187
IBM 486SLC2-66MHz VLB 64K C. w/8MB RAM	390
IBM 486SLC-33MHz ISA w/CPU	97
Cyrix 486DLC-40MHz VLB 128K C. w/Math Co	167
Cyrix 486DLC-40MHz ISA 128K C. w/Math Co	147
386DX-40MHz w/128K C.	97
386DX-33MHz w/4MB RAM Installed	197
386SX-40MHz	70

• CD-ROM •

Panasonic Double Speed CD ROM	'129
TEAC 4X Speed IDE CD ROM	299
Plextor 4X Speed SCSI CD ROM	458
16 Bit Sound Card	77

• VIDEO •

MGP	'15
VGA 256K 16 Bit	35
Trident SVGA 512K 16Bit	45
Trident SVGA 1MB 16Bit	61
S3 Windows Accelerator 1MB 32Bit VLB	72
Diamond Speed Star Pro SE VL 32Bit 1MB	127
Diamond Speed Star Pro SE PCI 32Bit 1MB	127
Diamond Viper-SE 64Bit PCI 2MB VRAM	277
Diamond Stealth PCI 64Bit 1MB DRAM	148
Diamond Stealth PCI 64Bit 2MB DRAM	197
Diamond Stealth VLB 64Bit 1MB DRAM	167
Diamond Stealth VLB 64Bit 2MB DRAM	209
Diamond Stealth VLB 64Bit 2MB VRAM	317
Diamond Stealth PCI 64Bit 2MB VRAM	310
Diamond Speed Star PCI 64Bit 1MB DRAM	149
ATi Mach 32 Wonder VLB 1MB DRAM	127
ATi Mach 64 Winboost VLB 2MB DRAM	219
ATi Mach 32 Ultra Plus PCI 1MB DRAM	127
ATi Mach 64 Winboost PCI 2MB DRAM	219
ATi Mach 64 Winturbo VLB 2MB VRAM	307
ATi Mach 64 Winturbo PCI 2MB VRAM	307
ATi Mach 64 Winturbo PCI 4MB VRAM	527
Spider PC-II 64Bit PCI 1MB	129
Spider PC-II 64Bit PCI 2MB	177
Spider PC-II 64Bit VLB 2MB	177
Spider Tarantula 64Bit PCI/VLB 4MB VRAM	425
IDE w/I/O 16Bit	15
IDE w/I/O 32Bit	25
IDE w/I/O 32Bit Enhanced	35

• HARD DISK/TAPE BACKUP •

1.2MB FDD (5.25")	'47
1.4MB FDD (3.5")	37
1.2/1.4MB Dual FDD	105
2.88MB FDD (3.5")	79
130MB IDE (17ms)	CALL
170MB IDE (17ms)	147
210MB IDE (14ms)	165
420MB IDE (13ms)	195
540MB IDE (12ms)	218
710MB IDE (12ms)	389
1.08GB IDE (10ms)	387
1.08GB SCSI (10ms)	477
1.80GB SCSI (10ms)	858
ST12550N 2.00GB 256K C. (10ms)	1277
ST15150N 4.00GB 256K (9ms)	2197
250MB Tape Backup Internal	149
350MB Tape Backup External	357
420MB Tape Backup Internal	197
Conner 525MB SCSI 200kb/Sec	470
Sony 2GB Dat Tape Backup SCSI-2	767
Sony 4GB/8GB Tape Backup	CALL

ALL SYSTEMS ABOVE INCLUDE:

- 4MB RAM of High Speed 70ns
- 1024 x 768 SVGA card
- 1.4MB Floppy Drive
- 1 Parallel, 2 Serial, 1 Game Port(s)
- 14" SVGA Color Monitor
- BTC 101 Key Enhanced Keyboard
- Desktop or Mini Tower Case w/Digital Display
- Serial Mouse

UPGRADES

VIDEO UPGRADE

• ATI Wonder Mach 32 VLB 1MB	'97
• Diamond Stealth 64 VLB 2MB	177
• Diamond Stealth 64 PCI 2MB	157
• ATI Ultra Plus PCI 1MB	97
• PCI 32 Bit 1MB Video	79
• PCI IDE HD Controller	19
• 32-bit SVGA VESA LB 1MB Video	39
• 32-bit IDE VESA LB Cntrl	15

HARD DISK

	420MB
• 540MB IDE HD	'38
• 730MB IDE HD	139
• 1.08GB IDE HD	217

MONITOR UPGRADE

• Masonic 14" N.I. 1024x768, .28dp	'65
• Shamrock 15" N.I. 1280x1024, .28dp	168
• Sony 15SF 15" N.I. 1280x1024, .25dp	319
• CTX 17" N.I. Low Radiation, .28dp	427
• MAG DX-17 N.I. LCD Green, .28dp	510

ACI COMPUTERS
205 W. FIRST STREET • SUITE #106 • TUSTIN, CA 92680
HOURS: Mon.-Fri. 10-6, Sat. 10-5
Prices subject to change. FINANCING AVAILABLE

(714) 838-4443
FAX: (714) 838-5055
FINANCING AVAILABLE
SALES & SERVICE & NETWORKING

SINCE 1987
ACI's commitment to YOU provides a full 1 YEAR WARRANTY on LABOR and PARTS, 72 HOURS BURN-IN TIME and QUICK DELIVERY with UPGRADES AVAILABLE!

VISA

8 Years in PC Business !!!

Sale!!!

@ Free Mouse/Pad
@ 5 years labor and 1 year parts warranty!!!
@ System delivery within a 25 mile radius!!!!
@ Ask about our available financing or leasing programs.

SUPER PENTIUM SYSTEM

* PENTIUM PCI Motherboard w/INTEL CPU
* CPU Cooling Fan w/Heatsink
* 8MB 72-pin RAM (Exp. to 128MB)
* 1.44MB FDD
* PCI IDE IO
* Diamond Speedstar PCI w/1MB (Exp. to 2MB)
* Shamrock 15" NI .28 Power Saving Color Monitor
* Built-in Math Co-processor
* 256k Cache
* MID Tower Digital Case w/230w
* 540MB IDE HDD
* 14.4/14.4 VOICE FAX MODEM
* Acekey Membrane Enhanced Keyboard

PENTIUM-60.....$1579
PENTIUM-90.....$1779
Upgrade to 17" Shamrock .....Plus $266

FAMILY MULTIMEDIA SYSTEM

* 486DX4 Green (Power Saving) Motherboard
* 256k Cache
* Mid-Tower Digital Casew/230W.
* 1.44MB FDD
* 32-Bit VLB IDE IO w/2S-1P-1G (Bi-directional Printer Port)
* Double Speed CD-ROM (Sony IDE, 250ms)
* 16-bit Sound Card
* 12 CD Titles (include Encyclopedia, Animals, & Games)
* CPU Cooling Fan w/Heatsink
* 4MB 72-pin RAM (Exp. to 128MB)
* 420MB IDE HDD
* 32-Bit VLB SVGA Card w/1M
* Acekey Membrane Enhanced Keyboard
* 14" SVGA .28 Color Monitor
* Pair of Stereo Speakers

Intel VLB486DX2-66.....$1139
Intel VLB486DX-33.....$1069
Intel VLB486SX-25.....$1009

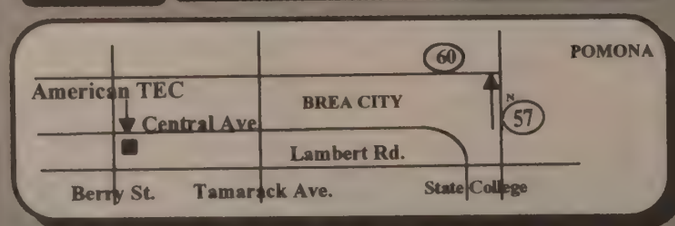
4xSPEED MULTIMEDIA SYSTEM

* 486DX4 Green (Power Saving) Motherboard
* 256k Cache
* Mid-Tower Digital Casew/230W.
* 1.44MB FDD
* 32-Bit VLB IDE IO w/2S-1P-1G (Bi-directional Printer Port)
* Quad Speed CD-ROM (Mitsumi)
* 16-bit Sound Card
* Microsoft Home Titles Package ($125 retail value)- Includes: Encarta 95-Encyclopedia, Golf, Works & Money, Dangerous Creatures & 12 Entertainment Games
* CPU Cooling Fan w/Heatsink
* 4MB 72-pin RAM (Exp. to 128MB)
* 420MB IDE HDD
* 32-Bit VLB SVGA Card w/1M
* Acekey Membrane Enhanced Keyboard
* 14" SVGA .28 Color Monitor
* 80 Watt JAZZ Stereo Speakers

Intel VLB486DX2-66.....$1265
Upgrade to 15" Shamrock .....Plus $109

* Prices & availability are subject to change without notice.
* Prices shown are based on 3% cash discount.
* We honor corporate, school, & government accounts.
* All brand new parts.

AMERICAN TECH ENHANCE COMPUTER CORP.
590 W. CENTRAL AVE., BREA, CA 92621
Tel: (714) 990-3933 Fax: (714) 990-3653
Hours: Monday-Friday 9:00-6:00 & Sat. 10:00-4:00



AMIGA *continued...*

not get dislodged when you reinstall the drive cage. On my 3000, the floppy drive was in the right drive bay and a 1GB hard drive was in the left. The original 40MB drive was in the rear bay. I found that the floppy drive mounting bracket would press against the fan mounted on top of the '040 chip.

My solution was to move the floppy to the left bay (the original factory location), remove the 40MB drive, and move the 1GB drive to the rear bay. Obviously, before doing this I had to copy all of the files from the 40MB and set up a new boot partition. The easiest way to do this is to boot up with a Workbench floppy disk and then move all of the files.

You may want to drill new holes in the A3000's rear hard disk mounting plate so the hard drive can be mounted with its connectors facing forward. (You'll only be able to use two screws.) This makes it easier for the SCSI ribbon cable to reach everything. Also, the WarpEngine butts right up against the socket for the A3000's expansion slot daughterboard. Therefore, I found it necessary to trim the bottom of the plastic insulation card that fits behind the daughterboard.

Once put back together, the WarpEngine is totally hidden by the drive cage. Adding more RAM or changing jumpers requires total disassembly again. So make sure the thing works before you piece it all together!

THE ART OF SCSI

The WarpEngine worked great with my Toshiba and Micropolis hard drives, Exabyte tape drive, and 44MB Syquest. However, I could not get it to work with my NEC double-speed CD-ROM, and my Sony DAT drive would only work if it was turned off when booting up. I believe I could have overcome the CD-ROM problem if I had configured it properly; however, I don't have the documentation for it.

Some compatibility problems can be solved by changing the SCSI jumper settings on the WarpEngine. For example, I found I needed to use a slower setting to get my older Toshiba drive to work reliably. I also found it necessary to place a shunt on jumper JP1, so that SCSI termination was powered by the bus.

An internal SCSI ribbon cable is provided with the board, but if you have external devices, you'll have to purchase an external connector. The external connector is the 50-pin SCSI-2 variety and attaches to the end of the internal ribbon. On the A4000 you mount the connector using the hole on the back of the 4000 marked "Expansion." For the 3000, you'll want the connector mounted on a backplane to fit in the expansion slot area. You also need a SCSI-2-to-50-pin-Centronics cable to connect to an external SCSI device.

The WarpEngine installation disk comes with a nice utility called SCSITools and a special WarpEngine HDToolBox icon that runs the AmigaDOS HDToolBox program so that it will recognize the WarpEngine SCSI device. These programs are used for initializing and partitioning hard drives.

SPEED

I used the "Diner-West" scene from Brad Schenck's Diner LightWave Objects Set (Terra Nova Development) to test the WarpEngine's performance. The scene includes a lot of reflective elements so it requires a lot of calculation. Resolution was set to medium with overscan.

	A3000	A4000	'040-40 WarpEngine*
No AA	10m24s	4m31s	1m34s
Low AA	35m55s	15m19s	5m22s
Med. AA	54m41s	24m17s	8m39s
Raytracing on:			
No AA	4h30m16s	1h10m33s	35m40s
Low AA	22h3m59s	5h51m39s	2h55m52s
Med. AA	not performed	10h5m40s	5h4m37s

AA=Antialiasing, h=hours, m=minutes, s=seconds

***A3000 and A4000 WarpEngine performance identical.**

The A4000 WarpEngine performed two to three times faster than a stock

HARDWARE SOFTWARE

THE ULTIMATE CHOICE

MATRIXSYS

7411 Garden Grove Blvd., Suite C (Beach & Goldenwest)

VESA LOCAL-BUS 486DX2-66 SYSTEM:

Intel CPU • 256K Cache Memory • 4MB RAM • 1.44MB FDD
420MB HD • 32Bit Contrl & VGA Card • 101 Enh. K/B
Super VGA Monitor (.28 NI) • Mini-Tower Case • Mouse

Special ***$999.00 + FREE SYSTO-TEK***

PCI PENTIUM 90MHz SYSTEM:

Intel M/board • 256K Cache • Pentium 90MHz CPU • 8MB RAM
1.44MB FDD • 540MB HD • PCI SVGA w/1MB • 101 Enh. K/B
Super VGA 15" Monitor (.28 NI) • Mid-Tower Case • Mouse

Special ***$1,950.00 + FREE SYSTO-TEK***

HARDWARE & PERIPHERALS

Multi-Media Pack
16Bit Sound Card • CD-ROM D/S • Speaker • 14 CD-Titles

SPECIAL $230

486 VLB w/256K w/o CPU	$99	VLB Enh. IDE Contrl.	$20
14.4K Int. FAX/MODEM	65	VLB Trident G. Card w/1MB	69
SoundBlaster CD 16 (OEM)	85	PCI Enh. IDE Contrl.	28
Sony CD-ROM D/Spin	119	Diamond Stealth 64 w/1MB	135
420MB Hard Drive	189	Diamond Stealth 64 VLB w/2MB	185
540MB hard Drive	215	Diamond Stealth 64 PCI w/2MB	185
1.44MB Floppy Drive	35	14" SVGA Shamrock Monitor (.28)	215
1.2MB Floppy Drive	45	15" SVGA Shamrock Monitor (.28)	305

Please Call Us for Free Estimate

(714) 895-3663

MATRIXSYS COMPUTER
7411 Garden Grove, Suite C • Garden Grove, CA

OFFICE HOURS: MON-FRIDAY, 9:30AM - 6:00PM
SATURDAY, 11:00AM - 4:00PM

WE ALSO OFFER THE FOLLOWING SERVICES:

- ***Monitor Repair***
- ***Printer Repair (Laser & Dot M.)***
- ***On-site Services***
- ***Custom Configuration***
- ***Hard Disk Repair***
- ***System Upgrade***

We accept VISA & MASTERCARD

Prices subject to change without notice. All prices quoted base on cash prices only

---

C & G

Lowest Prices Anywhere!

COMPUTER SOFTWARE OUTLET

OVER 1,000 ITEMS IN STOCK

IBM - MAC

WINDOWS 3.11	**$79.99**
BICYCLE POKER or SOLITAIRE	**9.99**
QUATRO PRO 5.0 (WIN)	**29.99**
PARADOX SE 1.0	**$19.99**
MICROSOFT MONEY 3.0	**$14.99**
NORTON UTILITIES 6.01	**$19.99**
TURBO C++ 3.0	**$49.99**
FORMBUSTER 2.0	**$9.99**
LEADVIEW 3.0	**$19.99**
MICROSOFT GOLF 1	**$14.99**
BICYCLE 4 GAME PACK	**$19.99**
LUCID LIGHTNING	**$19.99**
CASINO MASTER/WIN	**$14.99**
BITSTREAM FONTS/WIN	**$6.99**
ECLIPSE FAX/OCR	**$19.99**
JURASIC DINOSAURS CD	**$14.99**
IDEAFISHER/MAC	**$49.99**
STAR TREK SCREENSAVER	**$14.99**
BIBLE BUNDLE	**$14.99**
STAGESOFT ACCOUNTING	**$49.99**

75% To 90% OFF

CD'S From	$4.99
GAMES From	$4.99
EDUCATION From	$4.99
ADULT CD'S From	$9.99

CD ROM CLIP ART

SPECIAL PURCHASE!

VALUE OVER $149.99

- PREMIERE ART I - CD (2000 Images)
- PREMIERE ART II - CD (2000 Images)
- PUBLISHER'S PARADISE - CD (1500 Images & 200 Fonts)

$9.99 ea. or All 3 for $19.99

VISIT OUR STORE - TAKE AN EXTRA
10% OFF WITH THIS AD

Tel.: (714) 890-1581

Fax: (714) 890-1891

C & G **COMPUTER SOFTWARE OUTLET**

7441 Garden Grove Blvd., Suite K
Garden Grove, CA 92641

Dealer Inquiries Welcome

Shipping Charges:
UPS Ground: ($5.00 minimum)
UPS Blue: ($7.00 minimum)
Checks or money orders to:
C & G SOFTWARE DISTRIBUTORS

We accept VISA & MASTERCARD

Prices subject to change without notice. All prices quoted base on cash prices only

A4000, while the A3000 version gives a stock 3000 nearly eight times the performance! Aside from rendering-time benefits, your overall system will be snappier. Directories will load quicker, icons will pop up faster, screens will display sooner, etc.

The WarpEngine can reportedly handle SCSI transfer rates of up to 10MB/sec. MacroSystem Development tells me they've been able to get 9MB/sec burst and 6MB/sec sustained with a Barracuda hard drive. My fastest drive was not up to that spec, but it was pushing 4MB/sec sustained. According to the company, to maximize hard disk performance you can optionally set the partition block size to 4096 from the default 512. This must be done at the time you set up a partition, however. I tried this and experienced an unexpected substantial reduction in usable storage space. So if you have a lot of breathing room on your hard drive and want top speed, this may be the way to go; otherwise, stick with the default.

COMPATIBILITY

As far as I could tell, the few compatibility problems I encountered were all related to upgrading to AmigaDOS 3.1 on my 3000. In particular, AmigaDOS 3.1 does not like some of the old, but useful, ARP commands. The WarpEngine worked just fine with all of the software I tried, as well as my VideoToaster, Retina Z2, VLab, and Perisound boards.

TRADE-IN POLICY

If you've already invested in an accelerator, Zorro III memory, or Zorro III SCSI board, MacroSystem Development has a very liberal competitive trade-in policy. The following will get you an '040 WarpEngine: $600 + GVP G-Force Æ040; $500 + Progressive '040-28; or $950 + Fastlane, 4091 SCSI, DKB 3128, RCS X-Calibur, or 3640 (this is the A4000-040 CPU board).

COMING SOON

Any of the WarpEngines can be upgraded to a 40MHz '040. The WarpEngine will also be upgradable to the '060 (when it becomes available), probably in the form of a plug-in CPU module. Soon to be released is a 50MHz card for the Amiga 3000, called the ImpulsEngine, that will double the speed of a 3000 and add up to 64MB of additional RAM. The board is expected to sell, sans RAM, for under $500. ■

Copyright © 1995 by Douglas J. Nakakihara. All rights reserved.

RESOURCES:

WarpEngine for the A3000: 28MHz $1150, 33MHz $1295, 40MHz $1495
WarpEngine for the A4000: 28MHz $899 (no CPU), 33MHz $1295, 40MHz $1495
SCSI-2 external connector: $49, $79 with cable

MacroSystem Development, Inc.
24282 Lynwood, Ste. 201
Novi, MI 48374
(810)347-3332

H. Co. Computer Products
16812 Hale Ave.
Irvine, CA 92714
1-800-RAM-CHPS, ext. 122

Active Business Computer
Tel: (310) 477-7280

Call for other Configuration!!

486 SLC2-66MHz
MINI TOWER CASE
4MB RAM
210MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$825.00

DOS +$45 Windows +$55

486 DX2-80MHz
MINI TOWER CASE
4MB RAM
420MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$1025.00

Windows for Workgroup +$75

Pentium 90MHz
MINI-MID TOWER CASE
8MB RAM
540MB HD
1.44 FLOPPY
2S, P, G PORT
1MB SVGA CARD
14" SVGA MONITOR
KEYBOARD
MOUSE
$1899.00

1.2 MITSUMI FLOPPY	$42	CONNER 270MB HD	$165	512K ISA SVGA CARD	$40
1.4 MITSUMI FLOPPY	$32	CONNER 420MB HD	$195	1MB ISA SVGA CARD	$65
1.2 TEAC FLOPPY	$47	CONNER 540MB HD	$225	1MB VESA SVGA CARD	$79
1.4 TEAC FLOPPY	$37	COLORADO 350MB TAPE BACKUP DRIVE			$179

All Prices are Cash Discounted.

Price and Availability are subject to change without notice.

Services are Available for IBM Compatible and LAN
11919 Santa Monica Blvd. W. Los Angeles, CA 90025

Lake Forest Computers

Novell Certified NetWare Engineer

TEL:(714) 837-4284! BBS:(714) 837-4285! FAX:(714) 837-4286!

24 Hours FREE Bulletin Board System, logon speed at 2400bps to 14400bps

New Pentium PCI 60/90 Power Workstation

INTEL Made Mother Board

- INTEL Pentium 60/90MHz CPU
- Flash AMI BIOS, 256K Cache
- 1.44MB FD(Teac), Medium Tower Case
- 250W UL Green Power Supply
- Maxi 101 Keyboard, Hi-Res Mouse & Pad
- 8MB RAM at 70ns, Exp. 128MB
- 540MB IDE Hard Drive
- PCI Enhanced IDE interface
- Two 16552 UART Serial, Bi-directional Parallel
- 64bit PCI SVGA Graphics Card w/1MB RAM
- 15" FLAT, SVGA NI Green Monitor
- 1 Full Year Parts & Labor Warranty

Best Buy Pentium-60 $1889

Pentium-90 $2089

486 DX2/66 VLB Multi-Media PC

Pentium CPU Upgradable

- 486DX2/66 CPU(ZIF Socket)
- 256K Cache & Cooling Fan
- 4MB RAM(Exp. to 128MB)
- 1.44MB FD(TEAC)
- Mini Tower Case
- 230W UL Power Supply
- 101 Enhanced Keyboard
- Hi-Res Mouse & Pad
- 540MB IDE Hard Drive
- 16bit Sound Card, 2 Speakers
- Double-Speed CD-ROM
- VLB IDE/IO w/2S/1P/1G
- VLB SVGA Card w/1MB
- 14" SVGA, NI, Green Monitor
- 1 Full Year Parts & Labor Warranty

$1399 Only !

FREE CLASS

Buy a computer, get one day free Computer Application Class! AT

New Horizons Computer Learning Center

486DX2/66 VLB Novell File Server

Pentium CPU Upgradable

- 486DX2/66 CPU(ZIF Socket)
- 256K Cache & Cooling Fan
- 16MB RAM (Exp. to 128MB)
- 1.44MB FD(TEAC)
- Medium Tower Case
- 250W UL Power Supply
- 101 Enhanced Keyboard
- 1GB Enhanced IDE HD
- VLB IDE/IO w/2S/1P/1G
- VLB SVGA Card w/1MB
- 14" SVGA Green Monitor
- Novell Approved NIC
- 8 Ports UTP HUB
- 1 Full Year Parts & Labor Warranty

$2189

3Com EtherLink III(UTP)	$125
16Bit Ethernet NIC(Combo)	$55
Novell Netware 3.12(5Users)	$599
Novell Netware 3.12(10Users)	$1399

Multi-Media NoteBook

Key Features

- 9.5" LCD panel (Mono and Color TFT)
- 10.3" LCD panel (Color dual scan STN LCD)
- 3&1/2", 1.44MB Floppy Drive
- 64 gray shades (Mono) & 256 Colors (Color)
- 1MB VESA Local Bus Video
- Simultaneous Display Features
- 85/86 keys keyboard and special hot keys
- Built-in Trackball mouse
- 1 Parallel port, 1 Serial port, Ext. VGA port
- External Keyboard/PS2 Mouse port
- Docking connector for Docking Station
- PCMCIA type II/III Connector
- Audio Line in and Speaker out Connector
- Built-in Sound Chip & Microphone
- 5.8 LBS (Mono), 6.8 LBS (Color)
- NIMH (3-3.5hrs, Mono), (2.5-3hrs, Color)

Mono Screen:

486SX/33, 4MB, 262MB HD — **$1395**

486DX2/50, 4MB, 262MB HD — **$1475**

486DX2/66, 8MB, 340MB HD — **$1665**

Dual-Scan Color Screen:

486SX/33, 4MB, 262MB HD — **$1895**

486DX2/50, 4MB, 262MB HD — **$1975**

486DX2/66, 8MB, 340MB HD — **$2335**

486DX4/100, 8MB, 520MB HD — **$2695**

Active Color Screen:

486DX2/66, 8MB, 340MB HD — **$3200**

Complimentary Image Scanning

We will scan up to a PAGE with our COLOR Scanner

35¢ each

3.5" DS/HD Diskettes (2MB Unformatted) Quality Guaranteed For Duplicators, OEM All Computer Users *As Low As* 35¢ *each*

We do service:

- PC Repair
- System Upgrade
- Memory Upgrade
- Monitors Repair
- Network Install
- CNEs Work for you
- Prices are Subject to change without Notice
- Prices reflect 3% Cash Discount

DISCOVER · AMERICAN EXPRESS · VISA · MasterCard

All logos and Trademarks are the property of their respective companies

CD ROM Titles ON SALE

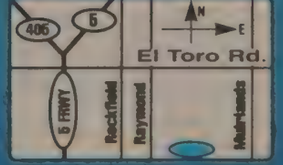
'95 Microsoft ENCARTA $65 Only !

Financing Available Please ask for Detailed Information

90 Days Interest Free Program

23532 EL TORO RD., #7A
LAKE FOREST, CA 92630

Business Hours:
M-F: 10:30-6, SAT: 10:30-4

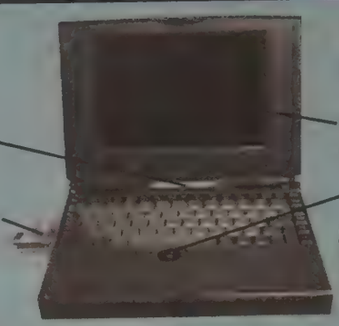


The CALIFORNIA COMPUTER The CALIFORN

TROGON 380 SOUNDX

- SL Enhanced 486DX-33, DX2-50/60 DX4-75/100
- 4MB RAM, Easy Expand up to 20MB
- 128KB Bios Flash ROM
- Int. 250MB Hard Disk (340/520MB)
- 3.5" 1.44MB Floppy Drive
- Ports for 1S, 1P (Bi-Directional), VGA, PS2 Keyboard, Audio Jack, Earphone out
- PCMCIA 2 Type II or 1 Type III
- 85/86-Key PC/AT w/12 Function Keys KB
- 16mm Center Micro Trackball Mouse Built-in
- 10.3" Dual Scan DSTN 640x486 Simultaneous
- 9.5" Active Scan TST 640x486 Simultaneous
- 32-bit VLB w/1MB VRAM Windows Accelerator NiMH Rechargeable up to 4.5hr Quick-Charge
- Weight: 6.3lbs Size: 10.9"W x 8.58"Dx1.75"H
- Accessories for: Docking Station, External Battery Charger, Automobile Car Cable

*Mono Model Does Not Have Sound Chip Built-In


LED Indicator
• Battery in use/Charging
• AC, DC and Low Battery Status
• HDD, FDD in use
• Caps Lock, Numbers Lock, Scroll Lock
• PCMCIA in use
Choice of two Type II or one Type III PCMCIA socket
• Fax/Modem • SCSI Card
• Network Adapter • Hard Disk
• Memory Card
10.3" Dual Scan 640x480 W/Local Bus and Window Accelerator Simultaneous Display
16mm center micro track ball

Multimedia Notebook
LOCAL-BUS PCMCIA

Du-Scan

486SX-33 w/ 260Mb HDD	$1850
DX2-50 w/340Mb HDD	$1950
DX2-66 8Mb RAM w/340Mb HDD	$2180
DX4-75 8Mb RAM w/520Mb HDD	$2643
DX4-100 12Mb RAM w/520Mb HDD	$2875

Mono

486SX-33 w/ 260Mb HDD	$1393
DX2-50 w/ 260Mb HDD	$1455
DX2-66 8Mb RAM w/340Mb HDD	$1663

Active

486DX2-66 8Mb RAM w/ 340Mb HDD	$2999
486DX4-75 12Mb RAM w/520Mb HDD	$3675
486DX4-100 20Mb RAM w/520Mb HDD	$3999

intel inside pentium PROCESSOR 90 MHz Available

Du-Scan Pentium

Pentium 90Mhz 8Mb RAM w/ 540Mb HD D	$3790
Pentium 90Mhz 20Mb RAM w/ 720Mb HDD	$4525

Active Pentium

Pentium 90Mhz 20Mb RAM w/ 420Mb HDD	$5772
Pentium 90Mhz 8Mb RAM w/ 540Mb HDD	$5036

TROGON 400

- Built-in Mouse Point/Track point
- 16-bit Sound Blaster compatible sound system
- NiMH powered rechargable battery
- Advanced Power Management
- Built-in Microphone & stereo speakers
- CD-Rom
- Intel DX2-50, DX2-66, DX4-75 or 100MHz
- CD-Rom Bus Interface Ready
- 4MB Base, expandable to 32MB (regular 72-pin)
- Removable FDD for 2nd battery
- 9.5" DualScan & TFT Active LCD Screens
- 32-bit VESA LB w/ 1MB
- PCMCIA Type-III & Type-II

Mono

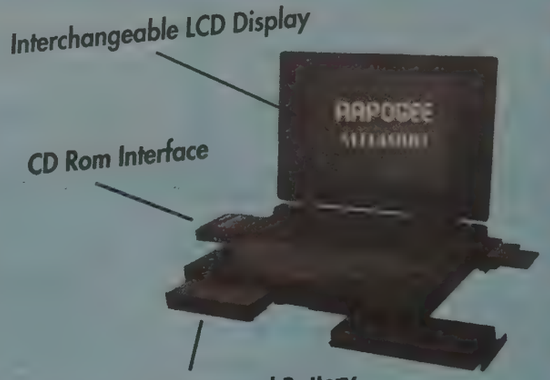
486SX-33 w/ 260Mb HDD	$1355
486DX-2 w/ 340Mb HDD	$1555
486DX-4 w/ 520Mb HDD	$1995

Du-Scan

486SX-33 w/ 340Mb HDD	$1899
486DX2-66 8 Mb w/ 340Mb HDD	$2125
486DX4-100 8MB w/ 340Mb HDD	$2445

Active

486DX2-66 8MB, w/ 340Mb HDD	$2925
486DX4-100 8MB, w/ 520Mb HDD	$3245



Canon Notejet & Notejet 2

- 486SX-33/486SLC2-50 MHz
- 4MB Up to 12MB
- 1.44MB Floppy Drive
- 130MB Hard Disk (190MB Option)
- Bubble Jet Printer Built-in
- Automatic Sheet Feeder Built-in
- PCMCIA - 2 Type II
- 10" LCD VGA Screen
- Canon 2-Button Hand Held Trackball
- MS DOS 6.0, WINDOWS 3.1
- 7.7 Lbs. w/Bubble Jet Printer Inside
- One Year Road Side Service

NoteJet	MONO	DSTN
486SX-33 4/120	$1577	$2029
486SX-33 4/200	$1840	$2471
NoteJet 2	**MONO**	**DSTN**
486SLC2-50 4/130	N/A	$2174
486SLC2-50 4/260	N/A	$2598

TROGON 800

- 32Bit VL-Bus
- 10.3" Dual Scan LCD Display
- Intel 486DX4-100MHz
- 4MB RAM Expandable to 32 MB
- Phoenix BIOS
- 3.5 Removable Floppy Drive
- Exchangeable to second battery
- 1 Parallel, 1 Serial, 1 Line-in, 1 Line-out audio Jack, 1 Microphone Jack, external VGA, Keyboard Port
- 6 lbs with Battery Optional second battery, Docking Station
- Built-in speaker, microphone and 25mm Super Trackball
- PCMCIA Slot Type III

This Month's Special

LOCAL-BUS PCMCIA

486DX4-100MHz 4MB/340MB HDD $2095

TROGON

- 486 DX-33
- 4Mb RAM,120(200)Mb HD Rem
- 1.44Mb Floppy Drive
- 8.5" Active LCD 640 x 480, 64 gray
- Build-in Trackball Mouse
- 1 Serial, Parallel, Mouse, VGA, Keyboard Port
- 83-key keyboard
- Lightweight: 5.5lbs
- Dimensions: 8.7" x 11.1" x 1.65

Acti Co

TROGON

- 486 SLC33 Mhz
- 4Mb RAM
- 1.44Mb Floppy Drive
- 120Mb Hard Disk (200)
- 9.5" Mono LCD Passive
- Two Batteries
- 83 Keys Keyboard
- Weight: 5.7 lbs
- Dimension: 11" x 8.5" x 1.75"

CD-ROM DRI Ext.

The CD revoluti on is here! A new EPP external CD-ROM drive that simply plugs into you parallel port and gives you grea performance. Supports EPP, ECP and standard parallel ports.

PCMCIA SOLUTIO

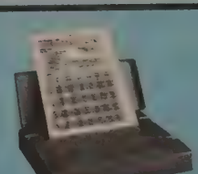
14.4 FAX/MODEM
ETHERNET COMBO
2MB FLASH CARD
4MB FLASH CARD
SCSI

Canon

Bubble Jet
BJC-600 color
720 x 360 dpi
$445

Bubble Jet
BJ-200e
360 x 360 dpi
256 Gray Scale
$217

Bubble Jet
BJC-4000color
720 x 360 dpi
$346



BJ-10sx
- 110 Characters/Sec
- Laser-Like Printer
- 2-Year Warranty

$235

LBP-430
Same as HP 4L
- 22 Fonts (8 Scalable)
- 1Mb up to 5Mb
- 2 Year Warranty

$554

NANAO

Trinitron

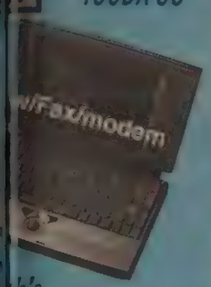
T2 / 20 .....$1899
T2 / 17 .....$1299

T-Series

Ask About our GE 3 Years Extended Warranty and 90 Day Same as Cash Financing Program

A COMPUTER *The* CALIFORNIA COMPUTER

486DX-33



$1888

486SLC-33

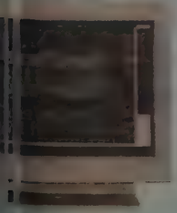
$899

$259

EMCIA

	$105
	$135
	$145
	$290
	$189

Special!



PENTIUM PCI

Intel Pentium Neptune Chipset

- New Intel Pentium CPU 90 Mhz
- 256K Cache up to 512K
- 8MB RAM up to 128MB
- Teac 1.44MB Floppy Drives
- 730MB Hard Drive
- PCI IDE/FDD Controller w/2S, 1P
- Diamond Stealth 64PCI w/2MB DRAM
- Tatung 15" SVGA NI Monitor w/Speakers
- Quad Speed CD-ROM (193ms)
- Sound Blaster 16-bit MCD Sound Card
- 17 CD Titles
- 101 Enhanced Keyboard
- Serial Mouse
- Mid Tower Case w/230w PS

90Mhz..... $2348

(Intel Pentium Neptune Chipset)

486DX2 VLB66

Multimedia

- 486 DX2-66 Mhz CPU
- 256K Cache, 2 Local Bus/7 ISA Slots
- 8MB RAM up to 32MB
- 1.44MB Floppy Drives
- 560MB Hard Drive
- VESA Local Bus IDE/FDD Controller w/2S, 1P
- VESA Local Bus SVGA Card w/1MB
- 15" SVGA NI Monitor .28 Dot
- Double Speed CD-ROM
- 16-bit Stereo Sound Card w/2 Speakers
- 101 Enhanced Keyboard
- Serial Mouse
- Mid Tower Case w/230w PS

$1350

486DX2 VLB66

- 486 DX2-66 Mhz CPU
- 256K Cache, 2 Local Bus/7 ISA Slots
- 4MB RAM up to 32MB
- 1.44MB Floppy Drives
- 560MB Hard Drive
- VESA Local Bus IDE/FDD Controller w/2S, 1P
- VESA Local Bus SVGA Card w/1MB
- 14" SVGA NI Monitor .28 Dot
- 101 Enhanced Keyboard
- Serial Mouse w/Pad
- Mid Tower Case w/230w PS

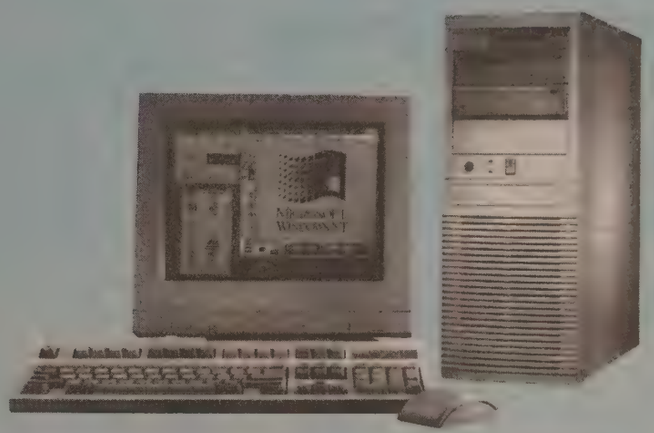
$1055

386DX 40

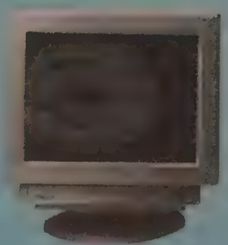
- 386 DX-40 Mhz CPU
- 256K Cache, 8 ISA Slots
- 4MB RAM up to 32MB
- 1.2 & 1.44MB Floppy Drives
- 250MB Hard Drive
- IDE/FDD Controller w/2S, 1P
- SVGA Card w/1MB
- 14" SVGA NI Monitor .28 Dot
- 101 Enhanced Keyboard
- Serial Mouse w/Pad
- Mini Tower Case w/230w PS

$850

TROGON



TATUNG



CM-17MLP

- 1280 x 1024/.26mm (N.I.)
- 1024 x 768 at 75Hz Refresh
- MPR II Low Radiation
- Multi-sync EPA
- Invar Shadow Mask
- Flat Screen

$629

CM-17MCR

- 1280 x 1024/.28mm (N.I.)
- 1024 x 768 at 75Hz Refresh
- Digital Control
- Multi-sync
- Dynamic Focus
- Flat Screen

$589

CM-15VBE

- 1024 x 768/.28mm (N.I.) at 75Hz Refresh
- Digital Control
- Low Emission
- EPA,Flat
- Speaker Built-in

$335

CM-14UAE

- 1024 x 768/.28mm (N.I.) at 60Hz Refresh
- Low Emission
- EPA

$225

Protect Your PC Investment

We Offer... 4 Year On-Site Service Contract GE Consumer Service

TROGON

TATUNG Authorized Dealer

Canon Authorized Dealer

Optiquest

NANAO Authorized Dealer

1 YEAR TCC

The CALIFORNIA COMPUTER

950 E. Colorado Blvd. Suite #102, Pasadena, CA 91106

Hours: Mon-Fri, 9:30-6:00PM ; Sat, 10AM-5PM

818-568-1122

Fax: 818-568-1515

MasterCard VISA Financing Available

All brand names are trademarks of their respective companies. Prices quoted base on 3% cash discount. Prices and specifications are subject to change without notice. TCC is not responsible for typographical or photographical errors. Financing are subject to credit approval

Ask About our GE 3 Years Extended Warranty and 90 Day Same as Cash Financing Program

MAGICTEK COMPUTERS

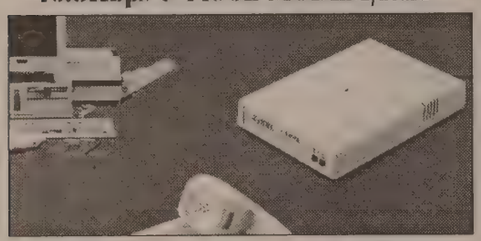
Highest Quality Systems & Service, At The Lowest Prices!

♦ FINANCING AVAILABLE ♦ FREE MOUSE PAD W/SYSTEM PURCHASE!
♦ DEALERS/CONSULTANTS ARE WELCOME! CALL FOR PRICING!!!

BBS: (714)939-9219 ♦ TEL: (714)939-9220 ♦ FAX: (714)939-9221

MONTHLY SPECIALS!

ZyXEL V.32 bis 16.8Kbps U-1496E MODEM/FAX



ONLY $275 (w/Purchase of Any System)

PENTIUM PCI 90MHz

- PCI Pentium 90MHz 256K Cache
- 4 PCI, 4 ISA Slots
- 8 Meg Installed Expandable to 128MB
- 540 Meg Hard Drive (Maxtor)
- IDE Controller (Enhanced) PCI
- 1.2 & 1.44 Floppy Drive (TEAC)
- AT I/O (2S, 1P, 1G) (16550 Chip)
- PCI Graphic Card 2 Meg
- 15" Monitor (1280x1024, N-I) w/Digital Control (Smile)
- Midtower Case w/230W Power Supply
- DOS 6.2 w/Manuals
- 101 Enhanced Keyboard (Maxi)

$1995

100MHz Available.....CALL

486DXII-66MHz MULTIMEDIA SYSTEM

- 486DXII-66MHz CPU (Intel) (Zif Socket)
- 256K External Cache (SIS Chipset)
- Built-In Math Co-Processor & 8K RAM Cache
- 4 Meg Installed Expandable to 128 Meg On Board
- 540MB IDE Hard Drive
- IDE Controller 32 Bit VLB
- 1.44 Floppy Drive (TEAC)
- Super VGA Card w/1024K 32 Bit VLB
- Super VGA Monitor Non-Interlaced (.28dpi)
- 101 Enhanced Keyboard (Maxi)
- Mid Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals
- Sound Blaster
- Speaker
- Microphone
- Panasonic CD ROM
- CD Titles

$1359

486DXII-66MHz VLB / 256K CACHE

- 486DXII-66MHz CPU (Intel) (Zif Socket)
- 256K External Cache (SIS Chipset)
- Built-In Math Co-Processor & 8K RAM Cache
- 4 Meg Installed Expandable to 128 Meg On Board
- 420MB IDE Hard Drive
- IDE Controller 32 Bit VLB
- 1.44 Floppy Drive (TEAC)
- AT I/O, 2 Serial, 1 Parallel, 1 Game Ports
- Super VGA Card w/1024K 32 Bit VLB
- Super VGA Monitor Non-Interlaced (.28dpi)
- 101 Enhanced Keyboard (Maxi)
- Mid Tower Case & 230W Power Supply
- DOS 6.2 w/Manuals

$1095

DX2-80MHz Available.....CALL
DX4-100MHz Available.....CALL
PCI Local Bus Available .....CALL

NOTEBOOK:

- 486SX-33MHz (Intel)
- 4MB RAM
- 1.44MB Drive
- 120MB Hard Disk
- VGA Screen (Mono)
- 2 Serial, 1 Parallel
- Trackball
- Carrying Bag

$1150

486DX-33MHz.....CALL
486DX-66MHz.....CALL
COLOR & CD NOTEBOOKS NOW AVAILABLE!

CD-ROM

Panasonic (Mitsushita) CD ROM (562)	$125
CD Software	40
TEAC Quad Speed CD (IDE)	245
Toshiba 3501 4X (SCSI)	295
NEC 3X (510)	250
CD TITLES AVAILABLE	*CALL*

SOUND CARDS

Sound Blaster AWE 32	$275
Sound Blaster 16 MCD	75
Discovery CD 16	249
Sound Blaster 16 SCSI-2	95
Sound Blaster 16 ASP SCSI 2	189
Other Models	CALL

VIDEO CARDS

VGA 256K, 16 Bits	$25
Cirrus Logic 1MG VGA	69
VESA Local Bus Orchid Kelvin 64	145
VLB S3 Chipset	69
VLB Cirrus Logic VGA	75
All VESA Local Bus Video Cards Available	CALL
All PCI Local Bus Video Cards Available	CALL
PCI ATi Ultra Pro w/2 Meg	295

MONITORS NEW!

(VIEWSONIC AUTHORIZED RESELLER)

ViewSonic 15"	CALL FOR BEST PRICE!
ViewSonic 17"	
ViewSonic 20"	
ViewSonic 21"	
ViewSonic 20G *(NEW!)*	
ViewSonic 15G 15", .28dp, 1024x768, 72Hz Refresh *(NEW!)*	375
ViewSonic 6E 14", .28dp, 1024x768, N/I	255
ViewSonic 17G 17", .28dp, 1280x1024, 72Hz Refresh, N/I	725
Smile 15", 1280x1024, w/Digital Control	325
MAG 17" MX17F	725
Optiquest	CALL
Arcus 1488 14" SVGA	205
VGA Mono 14"	95
Mono Amber 14"	82
Acrus 1458 Non-Interlaced 14" SVGA	225

PRINTERS:

Panasonic 1150	$139
Panasonic 4400	475
Epson All Models	CALL
HP Laser Printer All Models	CALL
Okidata All Models	CALL

KEYBOARDS:

Maxi-Switch	$32
Fujitsu 4700-601KB	38
Focus 2001	34
BTC 5330SX	19
Keytronic BE (Big enter)	29
Focus 9000	59
Focus 8000	37
101 Enhanced Keyboard	15

CASES:

Mini Tower w/Digital	$49
Mid Tower w/Digital	69
Big Tower w/Digital 230W	95
Big Tower w/Digital (10 Spaces) 250UL	135

COLORADO TAPE DRIVES:

250MB	$160
350MB	175
DC 2120 Tape XIMAT	15
Trakker 350MB	330
MicroSolutions Backup	330

MOUSE:

Logitech	$46
Microsoft	35
Portable Trackball	59
Serial Mouse	12
DEXXA Mouse	19

MEMORY CHIPS/MATH COPROCESSORS CALL!

HARD DISK:

Quantum	CALL
Maxtor	CALL
Conner	CALL
Western Digital	CALL
Micropolis 1.0GB SCSI	575

MISCELLANEOUS:

AT I/O w/16550 chip	$32
Adaptec SCSI 1542C	179
V-L IDE w/Cache (512K Upgrade to 16.5MB)	125
TEAC Floppy Drive (1.2M)	45
TEAC Floppy Drive (1.44M)	35
V-L IDE I/O Controller	19
TEAC 2-in-1	89
V-L SCSI Controller	105
SmartLink 9624 Fax/Modem	35
SmartLink14.14 Fax/Modem	65
9648 Modem	29

1 Year Parts & 2 Year Labor Warranty For Systems

MasterCard VISA

Business Hours: Monday-Friday: 9:30 A.M. - 7:00 P.M.
Saturday: 10:00 A.M. - 3:30 P.M.

ZyXEL

The Intelligent Modem That's a Wise Investment
Leading Industry Publications are Giving the ZyXEL Family of Modems Rave Reviews.

Data Comm Magazine Top Performer — ZyXel U-1496 Plus

Computer Shopper — July 1993 — ZyXel U-1496E Plus — ZyXel U-1496 Plus Enhanced — Top 10 List

Boardwatch Magazine — November 1992 — ZyXel U-1496 — ZyXel U-1496E

Winter 1992 — ZyXel U-1496 — Awarded 5 NeXTWORLD Cubes

PC Magazine 200 Top Rated — June 1993 — ZyXEL U-1496

Network World — May 10, 1993 — ZyXEL U-1496E

Byte — ZyXEL U-1496E Plus

Byte — ZyXEL U-1496E

PC Digest Ratings Report — May 1993 — ZyXEL U-1496 — ZyXEL U-1496E

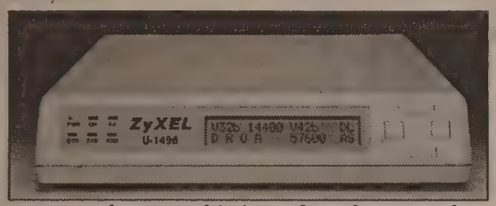
PC Magazine Users' Choice — June 29, 1993 — ZyXEL U-1496E Plus

PC Professional — February, 1993 — ZyXEL U-1496E Plus

PC Professional — November, 1993 — ZyXEL U-1496E

MORE VALUE FOR THE PRICE

ZyXEL award winning modems provide high performance and reliability with a full array of features at affordable prices and backs them with a 5-year parts and labor warranty.**



U-1496 Plus - Sophisticated Desktop Modem

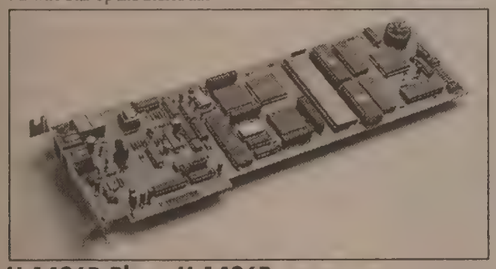
- 19.2Kbps Data/14.4Kbps Fax
- Front panel 20x2 LCD Display and Menu Control
- 2/4 Wire Leased Lines and 2-Wire Dial-Up
- On-Line Line Condition Monitoring
- Line Probing Techniques
- ZyCellular Protocol

$499 U-1496 Plus

U-1496E Plus - U-1496E Stand Alone Modem

- 12 LED Lights to Report Modem Operation
- Data/Voice Toggle Switch
- Async/Sync Transmissions
- 2-Wire Dial-Up and Leased line

$349 U-1496E Plus **$249** U-1496E



U-1496B Plus - U-1496B Plug-In Cards

- 8-bit Full Length ISA Card
- Includes the 16550 UART Chip

$339 U-1496B Plus **$239** U-1496B

STANDARD FEATURES

- 19.2Kbps Ultra High-Speed (Plus Series)
- 16.8Kbps Data/14.4Kbps Fax, EIA Class 2
- Line Probing Techniques*
- Asynchronous/Synchronous Mode
- Digitized Voice Capabilities
- Automatic Data/Fax/Voice Detection
- Fast Retrain with Auto Fall-Forward/Fall-Back
- Caller ID and Distinctive Ring Detection
- Remote Configuration
- Call-Back Security with Password Protection

U-1496P - Rugged Portable/Cellular Modem

- 16.8Kbps Data/14.4Kbps Fax Over Land Lines
- 14.4Kbps Data, Fax and Voice Over Cellular
- Asynchronous/Synchronous Over Land, Cellular
- Autoswitch Between Land and Cellular Networks
- Able to Run with AC or DC Power
- Durable Steel Case: 7.8"x2.8"x1.0"

$350 U-1496P

ZyVoice Switch Box

Allows users to record and play back voice mail messages easily and effectively with superior voice quality.

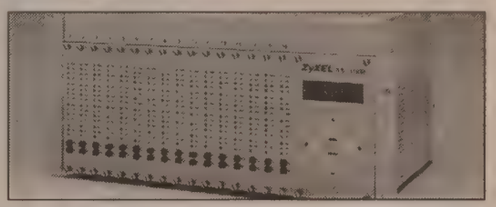
VoiceFax Software

Find out more about our VoiceFax Software which offers data*, fax and voice answering machine capabilities for DOS, Windows and Macintosh.

*Plus Series only. **2 year warranty on Rackmount Systems. All trademarks and registered trademarks are the property of their respective owners. Specifications and prices subject to change without notification. +DOS version only.

THEY WORK WHEREVER YOU DO

ZyXEL systems operate in all environments, including Windows®, DOS®, OS/2®, Macintosh®, UNIX®, NeXT®, Amiga®, and IBM®'s AS/400 and RS/6000. ZyXEL supports V.32bis/V.32 as well as industry standard data compression and error correction protocols.



RS-1602 - NMS Capable Rackmount System

- Holds up to 16 U-1496R Modem Cards
- 20x4 LCD Display for Configuration & Monitoring
- Permits Hot-Swapping of Modem Cards

$900 RS-1602

U-1496R - Rackmount Modem Card

- 19.2Kbps Data/14.4Kbps Fax
- Line Probing Techniques
- On-Line Line Condition Monitoring
- 2/4 Wire Leased Lines and 2 Wire Dial-Up
- ZyCellular Protocol

$479 U-1496R

Network Management System Software

Remotely configure and control up to 256 racks (maximum of 4,096 modems) from a single PC screen. Runs under Windows 3.x. Excellent for network analysis and planning.

$700 NMS

RS-1602E - Rackmount System

- Redundant Power Supply Capability
- 15 LED Lights Report Card Operation
- Permits Hot-Swapping of Modem Cards
- Holds up to 16 U-1496RE plus or U-1496RE Modem Cards

$499 RS-1602E

$349 U-1496RE*plus* **$249** U-1496RE

LOCAL AREA NETWORKING Interface Cards & Accessories

NETWARE

3.12	5	User	$595
3.12	10	User	1195
	25	User	1795
	50	User	2395
NetWare Lite			85
Lantastic AI 5.0			85
Window Work Group			CALL

ETHERNET ADAPTERS ALL MAJOR BRAND NAMES AVAILABLE PLEASE CALL!

8 Port Ethernet 10 Base-T Concentrator. . . $175
16 Port Ethernet 10 Base-T Concentrator . . 350
Pocket Ethernet 175
16 Bit Ethernet Cox 10 Base-T Combo 45

PRINTER SERVICE ALL MAJOR BRAND NAMES AVAILABLE PLEASE CALL!

Netquest Support 2-P/1-S Netware/TCP/IP..$310

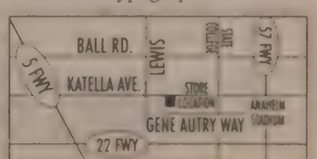
ARCNET/ETHERNET HUBS

Arcnet 8 Port Active Hub $145
Arcnet 4 Port Active Hub Card 65
Arcnet 4 Port Passive Hub..... 15
Arcnet 8 Port Twisted Pair Active Hub..... 145

Prices subject to change without notice. Not responsible for typographical errors.

MAGICTEK COMPUTERS

1218 E. Katella, Anaheim, CA 92805
Tel: 714/939-9220
Fax: 714/939-9221

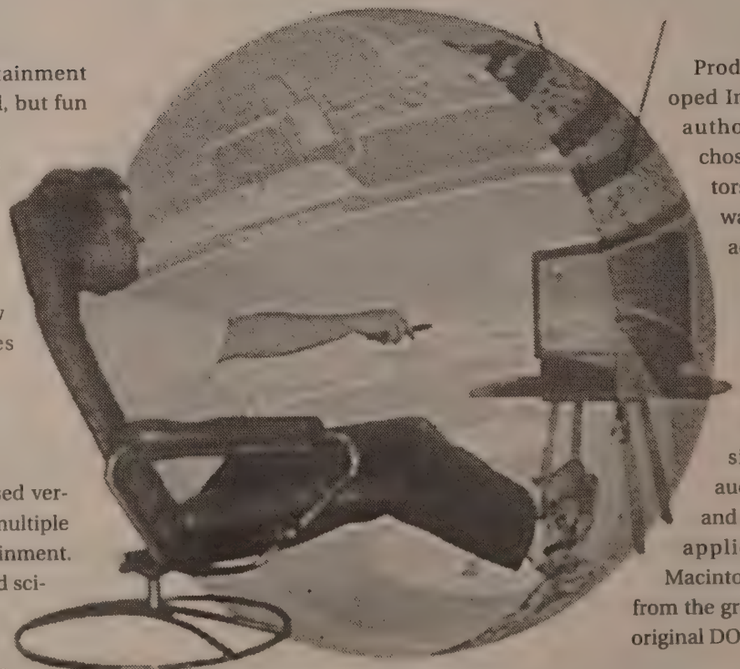


Excellent Edutainment

Great CD-ROM Titles And How They're Made

In this article we'll look at some edutainment CD-ROM titles that are not only useful, but fun for all.

Edutainment design is a formidable challenge for multimedia developers. They must organically combine information, narrative, game play, and entertainment in an interesting, engaging, and original way. Here you can see how different teams have built their wares under the hood.



THE INCREDIBLE MACHINE II

The Incredible Machine, in its floppy-based versions on several platforms, has been a multiple award-winner for computer-aided edutainment. It's a robust amalgam of whimsy and solid science that will nurture "Yankee ingenuity" and stimulate the child/adult (from three up) to learn utilitarian engineering and creative improvisation.

Projects are built from an inventory of 150 parts (ropes, pulleys, pipes, motors, gears, candles, conveyors, cats, buckets, dynamite, pinball bumpers, lasers, mirrors, solar collectors, and electrical components with attached sounds). There are scenic elements like trees, fences, and clouds to create friendly environments. You're presented with an ascending series of 160 puzzles that are like Rube Goldberg constructions gone out for bid. There is also a free-form mode, where you can draw upon the whole range of parts and even adjust the gravity and air pressure. *The Incredible Machine* is designed as a physics system where shape, density, gravity, mass, and velocity will operate in real-world ways, even if many of the elements have a goofy humor about them.

Producer Jeff Tunnell of Dynamix developed Incredible Machine Toolkit in C as an authoring system for creating parts. He chose not to include numbers such as vectors and angles on the screen, because he wanted to keep the program simple and accessible.

The graphics were created in DPaint on an IBM PC in a resolution of 640 x 480 in sixteen colors so that it can play on low-end machines. A great deal of the artwork was done on paper and then scanned in. In the CD-ROM version they were able to add Red Book audio, voice, and movies. Click on a part, and up pops a motion view of a real-world application of that gear or switch. The Macintosh version was authored and designed from the ground up, rather than as a port from the original DOS version.

STRADIWACKIUS: THE COUNTING CONCERT

Three helpful little bookworms beckon the child three years old and up through the frame of the Interactivator tool palette into the luminous, 3-D world of *Stradiwackius*, a $40 early learning interactive playroom which is as nurturing as it is zany.

There, the child can be introduced to music at

BY TONY REVEAUX

MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE

PACKARD BELL • AT&T • COMPAQ • NEC • ZENITH • LIBREX • TWINHEAD • PACKARD BELL • AT&T • COMPAQ • NEC • ZENITH • LIBREX • TWINHEAD • OKIDATA • CONNER • MAXTOR • AST • IBM

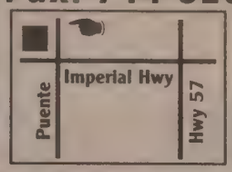
SHARP • EPSON • TOSHIBA • OKIDATA • CONNER • MAXTOR • AST • IBM • SHARP • EPSON • TOSHIBA • HEWLETT PACKARD • VIEW SONIC • KFC • SYQUEST • FUJITSU • SHAMROCK • SEAGATE

GRAND OPENING IN OUR NEW LARGER LOCATION

MicroSource COMPUTERS

1215 W. Imperial Hwy., Ste. 100 Brea, CA 92621

Phone: 714-526-0184
Fax: 714-526-0183



FINANCING AVAILABLE

WE WILL TRY TO BEAT OR MEET ANY ADVERTISED PRICE

Open 7 Days Mon-Fri 10:00 am-7:30 pm, Sat 10:30 am-4:30 pm, Sun (By Appointment)

486DX2-66 VLB w/256K CACHE MULTIMEDIA DREAM SYSTEM

GREEN PENTIUM READY

INCREDIBLE SALE

- 420MB HDD, 4MB RAM, 1.44MB FDD
- 14" SVGA Energy Saver Color Monitor
- 32 Bit 1MB SVGA VLB Window Accelerator
- 32 Bit Fast VESA Local Bus Controller
- Digital Case w/230W Power Supply
- 101 Enhanced Keyboard

$849

486DX2-66 VLB w/ 256K CACHE
SONY DOUBLE SPEED CD-ROM
16 BIT SOUND CARD
COMPLETE MULTIMEDIA

$1029

15" SVGA Monitor, 540MB HDD, Fax Modem, Panasonic/Sony Double Speed CDR 16 Bit Multi CD Sound Card w/Amplified Speakers, Titles & Above

$1239

100MHz POWER 486DX4-100 VLB w/256K CACHE

- 420MB HDD, 4MB RAM
- 14" SVGA Color Monitor
- 32 Bit 1MB SVGA Video Card
- 32 Bit VESA Local Bus Controller
- Digital Case w/230W, 1.44MB FDD
- 101 Enhanced Keyboard

$999

486-66MHz VLB COMPLETE SYSTEM

- 14" SVGA Color Monitor
- 2MB RAM, 1.44MB FDD
- 250MB Hard Drive
- 4HDD, 2FDD VLB Controller
- Digital Case w/230W PS
- SVGA Card
- 101 Enhanced Keyboard

$699

MOTHERBOARDS w/ CPU & Cache

386DX-40 w/CPU & Math Co Processor	$81
486SLC2-50 w/CPU	80
486 DX2-66 4 PCI 4 ISA w/256K Cache	249
Intel 486DX2-66 VLB Green Pent. Ready	249
AMD 486DX2-80 VLB Green Pent. Ready	239
486DX4-100 VLB Green Pent. Ready	359
IBM Blue Lightning	229
Pentium 90MHz w/CPU & 256K Cache	749
Pentium 66MHz w/CPU & 256K Cache	559
Pentium 60MHz w/CPU & 256K Cache	519

SIMMS MEMORY

1MB 70n/s	$32.99
4MB 70n/s	115.99
4MB 72 Pins	133.99
8MB 72 Pin	269.99
16MB 72 Pin	399.99
32MB 72 Pin	839.99

540MB HARD DRIVE $179.99

COLORADO 250MB TAPE BACK-UP $129.99

PENTIUM PCI 90MHz

- 256K Cache Expandable to 512K
- Super Digital Mid Tower
- 8MB RAM, 1.44MB FDD
- 420MB Fast IDE HDD
- 14" SVGA Color Monitor
- Diamond Speedstar PCI 1MB Win and DOS Accelerator
- PCI IDE 2S, 1P, 1G Controller
- 101 Enhanced Keyboard

$1499

Pentium 66MHz $1329
Pentium 60MHz $1289

GRAND OPENING SPECIAL

486DX2-80MHz VLB COMPLETE MULTIMEDIA SYSTEM

- Green Pentium Ready Motherboard
- Fast Double Speed CD ROM Drive
- Labtec SS700 Amplified Speakers
- 2 CD Titles
- 14" SVGA Color Monitor
- 4MB RAM, 1.44MB FDD
- 420MB HDD, SVGA Card
- 32 Bit 4 HDD/2 FDD VLB Controller
- Digital Case w/230W Power Supply
- 101 Enhanced Keyboard

$1049

MULTIMEDIA UPGRADE KIT

MITSUMI/TEAC QUAD SPEED

- 4X CD ROM Drive
- Sound Blaster 16 by Creative Lab
- Labtec SS700 Amplified Speakers
- 2 CD Titles

$269

SONY DOUBLE SPEED 55E

- 2X Speed CD ROM Drive
- 16 Bit MCD Sound Card
- 14 CD Titles w/Encyclopedia
- Labtec SS700 Amplified Speakers

$189

DISCOVERY CD 16

- Sound Blaster 16 by Creative Lab
- Panasonic Double Speed CD ROM
- Pair of Boosted Speakers
- 15 CD Titles & Microphone

$219

DIGITAL SCHOOL HOUSE '249

CD ROM DRIVES

Toshiba SCSI 3501B Quad Speed	$270.99
Mitsumi Quad Speed IDE	179
TEAC Quad Speed	184
Sony 33A Double Speed	105
NEC 3XI SCSI 510	229

CD TITLES AVAILABLE

CREATIVE LABS

Sound Blaster 16 Bit MCD	$69
Sound Blaster 16 SCSI II	99
Sound Blaster Awe 32	239

We'll Upgrade Your System For Only $39

SUPER BUY IN HARD DRIVES

CONNER

420MB IDE	$159.99
540MB IDE	189.99
540MB SCSI II	207.99
850MB IDE	259.00
1GB SCSI II IDE	449.99
1.2GB IDE	389.99
2.1GB SCSI	832.99

QUANTUM

540MB IDE	$189.99
540MB SCSI II	207.99
730MB IDE	243.99
730MB SCSI II	253.99
1.08GB SCSI II	495.99
2.1GB SCSI II	869.99
4.1GB SCSI II	2029.99

WESTERN DIGITAL

420MB IDE	$171.99
540MB IDE	193.00
1GB IDE	373.99

MAXTOR

540MB	$193.99

MICROPOLIS

1GB SCSI II 8.8MS	$512.99
2GB SCSI II 9MS	1045.99
3GB SCSI II 12MS	1259.00
4.3GB SCSI 8.5MS	1990.00
9.0GB SCSI 12MS	3105.00

HELP WANTED

Positions available for Store Managers, Sales Reps & Assembly Technicians. Selected candidates will be trained in the main office and may be transferred to branch offices within Southern California. Related experience & degree preferred but not required. Send or fax resume and salary requirements to the address and fax number above. No phone calls please.

486-50MHZ COMPLETE SYSTEM

- 14" SVGA Color Monitor
- 250MB HDD, 1.44MB FDD
- SVGA Card, 2MB RAM
- Digital Case w/230W PS
- 101 Enhanced Keyboard

$569

PRINTERS

HP DeskJet 540	$264.99
HP DeskJet 560C	439.99
HP LaserJet 4 Plus	1309.99
HP LaserJet 4P	884.99
HP 4L	583.99
HP 4MP	1245.99
HP 4ML	929.99
HP LaserJet 4V	1839.99
Canon BJC-600 Color InkJet	398.99
Canon BJ-200E BubbleJet	219.99
Canon BJ-105X BubbleJet	229.99
Epson Stylus 800+	239.99
Epson Stylus 720 Color	499.99
Epson Action Laser 1500	499.99
Okidata 400E	419.99
Okidata 410E	569.99

All systems come with 1 year parts and labor warranty. Prices and product availability are subject to change without notice. Call for current prices. We are not responsible for typographical errors. Prices reflect a 3% cash discount.

MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE • MICROSOURCE IS YOUR SOURCE

EXCELLENT EDUTAINMENT *continued...*

an accessible level while exercising counting, listening, and artistic skills. There are ten game pages involving music and math, with sizing and sorting games, randomly generated so that they are new each time. Wendy's Musical Chalkboard presents songs with lyrics, and lets the child compose his or her own music for each of the ten instruments. Pablo's Paint Session allows children to paint on the instruments with accompanying sound effects.

The Stradiwackius Factory combines true instrument theory with whimsy, providing a Spike Jones-style repertoire of nontraditional instruments such as a bicycle pump, seashell, and air-raid siren. The child can join combinations of them and then play the unique result. Children learning English, French, German, or Spanish can switch "on the fly" between the four versions of the program, though only one is running at any time.

Working on the Macintosh developer platform, the T/Maker team used Macromedia's MacroModel to create the 3-D modeling, Director for authoring, and Strata Studio Pro for rendering. QuickTime is used for audio-only, movies, and movies containing video.

For the Stradiwackius Factory, Dave Shields wrote code that allows sounds to be blended into one external sound file to support the child's unique instrument sounds when they are created. From twenty-four individual sound elements, there can be almost one thousand possible combinations. There are over two hundred sound files for each of the four languages (English, French, Spanish, and German).

LITTLE MONSTER AT SCHOOL

Little Monster at School illustrates the successful Living Books edutainment form—a multimedia storybook. Based on a best-selling Mercer Mayer book, this $40 title encourages early learning of ABCs, numbers, science, and geography for ages three to eight.

Each page/scene is full of discovery animations which draw the user in and support the learning exercises. The stories are spoken with text. Each word can be highlighted to hear it spoken. Many children enjoy creating their own sentences by clicking on different sequences of words. Again, the child can switch between the English and Spanish versions of the program, though not see or hear both on the screen at the same time. Since all the characters are friendly "monsters," no ethnic identification is apparent.

Most of the animation is done in Macromedia Director, but Brøderbund has developed its own cross-platform Living Books Engine based on C, which streams the audio from the CD while the CPU drives the animation. Within a Macintosh graphics environment they use applications like Photoshop and Illustrator, augmented by a host of other custom-built tools. The animators work in an on-screen straight-ahead mode, and also create work on paper which is scanned in. Except for some of the foreign language elements, all of the sound work is created and finished in their own sound studio.

THE SCAVENGER HUNT ADVENTURE SERIES: AFRICA

This $40 title from Davidson is not only a warm and delightful natural history program for ages six to adult, its Virtual Landscape environment points the way to things to come in multimedia. Simply by using the mouse, the user can navigate in 360-degree, eight-directional point of view while journeying through four African regions. Even on a low-power machine, you can visually move around in the screen with the same effortlessness with which you would look around the room.

Hosted by Vica the Vulture, *Africa* is full of learning activities which, with built-in randomness, provide a variety of adventures. As you make your way through the jungle or the savannah, you will be looking for animals to photograph with the camera icon to paste into the correct panes of the photo album. Each animal is animated, with character voices that tell you things about their lives. More information can be found in textbook definitions of plants and animals, including endangered species. You can print out line art pictures of the animals you have photographed.

Produced by Irvine, CA-based SWeDE, *Africa* was authored in L7, its proprietary authoring system, which is object-oriented in C++ with different functional modules. Most of the graphics were done in traditional media and collage techniques, often using natural materials. The backgrounds for the four major environments were large murals. All these were scanned and brought into the Macintosh graphic environment, where Adobe Photoshop and some Illustrator were used. DeBabelizer processed the files for efficient memory management, and to be able to blend the ends of the murals so that they could run in a seamless 360-degree horizontal cylindrical continuity. Each environment has four layers, each with a larger number of animals and details.

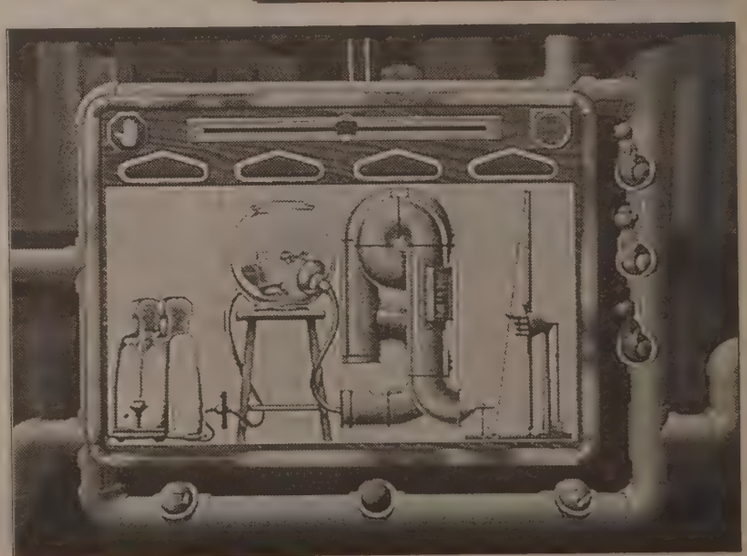
QuickTime was used extensively, in 130 interactive animations, and in an unusual way to support the Virtual Landscape. Each landscape is actually

The ImagiNation Network

Within the next three to five years, interactive television will unleash a bountiful flow of edutainment in every flavor. For those cybersprouts who are online-savvy—and there are more of them every day—The ImagiNation Network (INN) is already switched on.

Founded by Sierra On-Line and jointly owned with AT&T and General Atlantic Partners, INN (Burlingame, CA) provides interactive, online, multiplayer entertainment for IBM PC-compatible computers with a modem. A Macintosh version is said to be in the works. INN also provides access for Sega Genesis Game Systems via The EDGE 16 device (developed by PF Magic) and a TV.

The ImagiNation Network uses the topography metaphor of a theme park, linked with bulletin boards and conferences. SierraLand is an arcade-style action park with games like Red Baron, NTN Trivia, INN 3-D Golf, Graffiti, Stratego, and Rocket Quiz. CasinoLand is an electronic Las Vegas sporting games like Poker, Roulette, and Veracity. The Clubhouse checks in with Checkers, Chess, Bridge, Go, and Hearts. There's an Airport; the Post Office and the Phone Booth support email and a lively online newsletter; The Mall is there for online shopping; and there is a Town Hall for general information. Medievaland supports The Shadow of Yserbius and The Fates of Twinion, two sophisticated online fantasy role-playing games. In the Schoolhouse forum you'll find edutainment content developed by BrightStar. Above all, for a child to gain the skills and confidence of navigating and interacting in cyberspace and communicating across the nation with electropeers, this activity in itself can be edutainment of the highest order.



continued on page 235

SHAMROCK

The Full Screen Monitor

We Take Great Pride In Our High Quality Monitors Sold And The Excellent Service We Provide

SRC-2002

21"/20" SRC-2102/2002

- AR Bonded Panel CRT with Anti-Static Treatment (Available 21" only)
- 0.28mm Dot Pitch CRT w/Invar Shadow Mask and Anti-Static Treatment
- Dynamic Focus Gun
- Wide Autoscan Capability From 30KHz to 82KHz
- Ultra High Resolution of up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-Sub and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available for Picture Sizing and Centering
- Additional Rotation Control Designed to get Exact Location of Image w/out Tilt Distortion Due to Earth Magnetic Field
- Accurate Color Control Designed to Match w/Individual Color Output Needs
- *MPR II Low Radiation*

SRC-1502

ALL MONITORS 15" OR LARGER ARE DIGITAL WITH TILT CONTROL!!

SRC-1452 SUPER VGA II

- Horizontal Frequency: 30-38KHz, 47-50KHz
- Resolution: Maximum 1024x768 (Non-Interlaced) 0.28mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible with Apple Mac II
- *MPR II Low Radiation Available*

NOW AVAILABLE

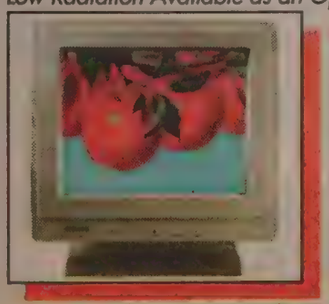
17" O.S.D. CONTROL AUTOSYNCHRONOUS COLOR MONITOR SRC 1703

- The 17" FST, 0.28mm dot pitch CRT with advanced technology of ASARC coating, double focus gun, and INVAR mask
- IBM and APPLE system compatibility
- Automatically adjusts for picture's centering and sizing at every popular graphic mode from 640x480 to 1280x1024. Total 23 screen presets
- Auto synchronization: Horizontal: 24-64 KHz; Vertical: 47-104 Hz
- Full screen (overscan) capability with edge to edge video display
- Rotation/Tilt control designed to position image upright without Tilt distortion due to geomagnetic field impact
- Trapeziod and pincushion correction controls added to improve the picture's geometric distortions
- R.G.B. color control adjusts displayed colors to perfectly match with printer output
- Power saving function in compliance with EPA and VESA DPMS standard
- *Low Radiation MPR II option*

2 YEAR WARRANTY PROGRAM IS AVAILABLE... PLEASE CONTACT US!

SRC-1502/1502L 15" VESA MONITOR

- Horizontal Frequency 24-64KHz
- Resolution: Maximum 1280x1024 (Non-Interlaced) .28mm CRT
- Full Screen
- Universal Power Supply 110/220
- 24 Microprocessor Screen w/Factory Presetting
- Tilt Rotation Control to Position the Picture Without Tilt Distortion Effected by Earth Magnetic Field
- Pincushion Adjustment
- *MPR II Low Radiation Available as an Option*



SRC-1451/1452

energy

EPA POLLUTION PREVENTER

SRC-1702

SRC-1702/1702L 17" FLAT SQUARE

- Ultra High Resolution up to 1600x1280 (Non-Interlaced)
- Two Types of 9 Pin D-SUB and 5xBNC Connectors are Provided for Optional Video Signal Connection to Prevent Image Distortion
- 20 Programmable Digital Control Memory Settings Available in SRC-1702 for Image Sizing and Centering
- Accurate Color Control Designed in SRC-1702 to Make the Displayed Color Match Closely the Printer Output
- Horizontal Frequency: 24-82KHz Continuous
- 0.26mm Dot Pitch Non-Glare, F.S.T. w/Double Focus Gun, CRT Type
- *MPR II Low Radiation Available as an Option*

SRC-1451 SUPER VGA I

- Horizontal Frequency: 30-38KHz
- Resolution: Maximum 1024x768 (Interlaced) 0.28mm/0.39mm CRT
- Full Screen
- Universal Power Supply 110/220
- Compatible w/Apple Mac II
- *MPR II Low Radiation Available*

FOR DEALERS ONLY: Tel. 310/946-9392 • FAX 310/946-4924

MAX IT OUT, W

Home Multimedia Desktop

PC Computing

4-Star Quality Award!
National PC manufacturer comparison, July '94

MultiMedia 95

MULTIMEDIA 95

- 16 MB RAM, 256K Write Back Cache
- 850 MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- Diamond Stealth 64 with 2MB PCI Accelerator, (Top Performer in DOS & Windows)
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit "true-sound" Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- 1.44 MB, 3.5", Floppy Disk Drive
- 7-Drive Bay Vertical Case with 230W P.S.
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports

486DX2/66 . . .$1895
486DX4/100 . .$2095
PENTIUM™ /60 .$2295
PENTIUM™ /90 .$2545
PENTIUM™ /100 $2845

OPTIONAL TOWER CASE & 21" MONITOR ON ALL SYSTEMS

MAXIMUS' PCs demonstrate our top-quality engineering & competitive, cost-effective pricing. Each of these systems is backed by our industry-leading General Electric optional 4-year extended on-site service warranty-as well as our Maximus' Lifetime Free Labor and First-12 month's Express Parts Replacement Warranty, with Toll-Free Tech-Support for as long as you own your system!

PCI LOCAL BUS & FAST HARD DRIVES

Our systems bring together superfast, efficient 64-bit PCI video accelerator and "Enhanced" Type-3 IDE or Fast SCSI-2 hard dries to enable you to win today's productivity battles-without breaking your budget!

PERSONAL TOUCH SERVICE

Come in and feel free to ask one of our highly-trained sales technicians to help you design a system that will suit your own specific needs. Tell them what applications you generally use, the operating environment, network requirements and they will help you design your own customer configuration. There's no extra charge-it's all part of our Maximized Personal Service!

SCSI-2 WORKSTATION

- 16 MB RAM, 256KB Write Back Cache
- 1,060 MB 9ms SCSI-2 Hard Drive
- PCI Fast SCSI-2 Hard Drive Controller
- Diamond Stealth 64, 2MB, PCI Graphics Accelerator, 42+ WinMarks!
- 15" Flatscreen, .28mm, Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- 7-Drive Bay Vertical Case with 230W P.S.
- 4X Quadra Speed SCSI-2 CD ROM
- 1.44 MB, 3.5", Floppy Disk Drive
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports
- Add $145 to Upgrade to Fast & Wide SCSI-3

486DX2/66 . . . . . .$2175
486DX4/100 . . . . .$2375
PENTIUM/60 . . . . .$2575
PENTIUM/90 . . . . .$2825
PENTIUM/100 . . . .$3125

PCI GRAPHICS MEDIA

- 16 MB RAM, 256K Write Back Cache
- 850 MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- ATI MACH 64 with 2MB PCI Accelerator, (PC Magazine Editor's Choice)
- MAG 17" Digital Flatscreen, .26mm, Low Radiation Color Monitor (Computer Shopper '94 Best Buy)
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit "true sound" Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- 1.44 MB, 3.5", Floppy Disk Drive
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports

486DX2/66 . . . . . .$2195
486DX4/100 . . . . .$2395
PENTIUM/60 . . . . .$2595
PENTIUM/90 . . . . .$2845
PENTIUM/100 . . . .$3145

ALL MAXIMUS SYSTEMS COME WITH MAXI- ADVANTAGE

1 YEAR WARRANTY PARTS & LABOR

EXPRESS PARTS REPLACEMENT

GE

4 Year G.E. On-Site Service Warranty optional

MAXIMUS ANY-SYSTEM UPGRADES

- Double-spin IDE CD-ROM . . . . . .$ 139
- 4X Quadra-spin SCSI-2 CD-ROM . . . . . .$ 299
- Orchid Soundwave32 DSP sound card $ 189
- SoundBlaster 16-bit sound card . . . . . .$ 99
- 14.4K Send-receive fax modem . . . . . .$ 69
- 28.8/14.4 Send-receive fax modem . . . .$ 139
- PCI Ethernet card . . . . . .$ 139
- 420 MB Internal tape backup . . . .$ 199
- 2 GB SCSI tape backup . . . . . .$ 779

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. INTEL, INTEL INSIDE AND PENTIUM PROCESSOR ARE REGISTERED TRADEMARKS OF INTEL CORPORATION. ALL OTHER LOGOS AND TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE COMPANIES. 486 SYSTEM CONFIGURATIONS FOR PCI INCLUDE 3 PCI SLOTS. PENTIUM CONFIGURATIONS INCLUDE 4 PCI SLOTS. * ALL PHOTOGRAPHS ARE FOR ILLUSTRATION PURPOSES ONLY AND MAY NOT A TRUE REPRESENTATION OF ACTUAL PRODUCTS. NOT RESPONSIBLE FOR ERRORS IN TYPESETTING. ©1994 MAXIMUS COMPUTERS.

TH MULTIMEDIA

System For Only $1,095

Performance

PCI/VLB BEST BUY

- 14.4KB S/R Fax Modem with Software
- 8 MB RAM, 256K Write Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI/VLB Enhanced IDE Hard Drive Controller
- 64-bit/32-bit PCI/VLB Graphics Accelerator, 1MB, Ultrafast - up to 38+ WinMarks!
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 1.44 MB, 3.5", Floppy Disk Drive
- 2 Serial, 1 Parallel & 1 Game Ports

486DX2/66VLB . . $1275
486DX2/80VLB . . $1325
486DX4/100PCI . $1525
Pentium/90PCI . . $1875
Pentium/100PCI . $2175

MULTIMEDIA PRO WITH OPTIONAL TOWER CASE & 17" MONITOR

PCI/VLB OFFICE

- Double Speed 2X CD-ROM Drive
- 14.4KB S/R Fax Modem with Software
- 8 MB RAM, 256KBWrite Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI or VL-Bus Enhanced IDE Hard Drive Controller
- Fast PCI 64 or VL- Bus 1MB Graphics Accelerator
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel, 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX2/66VLB . . $1395
486DX4/80VLB . . $1445
Pentium/60PCI . . $1675
Pentium/90PCI . . $1995
Pentium/100PCI . $2295

PCI/VLB OFFICE WITH OPTIONAL SPEAKERS

SUPERNOTE

- Travelers' Multimedia Notebook Performer
- 4 MB RAM,& 340 MB, 2.5", Hard Disk Drive
- 32-bit Local Bus IDE Hard Drive Controller
- 32-bit VL-Bus Graphics Accelerator, 1 MB, Supports External Monitor up to 1280x1024
- Large 10.3" Dual Scan & 9.4" Active Matrix/Monochrome Display
- Built-in Sound Card, Microphone & Speaker
- 86-key Keyboard with Numeric Keypad
- Built-in Large 19mm Trackball
- 1.44 MB Micro Floppy Disk Drive
- Two Type II or One Type III PCMCIA Slot
- 16550 UART Serial & Parallel Ports
- Up to 2.5 Hours Battery Life & 6.5 Lbs
- Carrying Case & AC Adapter Included

486DX/33MONO $1495
486DX2/66DUAL SCAN . $1995
486DX4/100DUAL SCAN $2295
DUAL SCAN TO ACTIVE MATRIX ADD $850

MEDIANOTE WITH BUILT-IN CD ROM,
PLEASE CALL FOR UPGRADE OPTIONS; 8MB,16MB,32MB PCMCIA CARDS & MORE

MultiMedia

MULTIMEDIA PRO

- 8 MB RAM, 256K Write Back Cache
- 520 MB 11ms Enhanced IDE Hard Drive
- PCI Enhanced IDE Hard Drive Controller
- Vision PRO 64, 1MB, PCI Graphics Accelerator, Ultrafast - up to 38+ WinMarks!
- 15" Flatscreen, .28mm Color Monitor (30% Larger Edge-to-Edge)
- 4X Quadra Speed CD-ROM Drive, 600KB/Sec
- SoundBlaster 16-bit Stereo Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX2/66 . . . $1595
486DX2/80 . . . $1645
486DX4/100 . . $1795
Pentium™ /90 . $2145
Pentium™ /100 $2445

HOME MULTIMEDIA

- 4 MB RAM, 256K Write Back Cache
- 420 MB 11ms Enhanced IDE Hard Drive
- PCI or VL-Bus Enhanced IDE Hard Drive Controller
- Fast PCI 64 or VL-Bus 1MB Graphics Accelerator
- 14" SVGA, .28mm, Non-Interlaced Color Monitor
- Double Speed CD-ROM Drive
- 16-bit Stereo Sound Card
- 2 Amplified Speakers & Choice of CD Bundles
- Enhanced 101-key Keyboard
- High Resolution Serial Mouse
- 2 Serial, 1 Parallel & 1 Game Ports
- 1.44 MB, 3.5", Floppy Disk Drive

486DX/33VLB . . . $1095
486DX2/50VLB . . $1145
486DX2/66VLB . . $1195
486DX2/80PCI . . $1295
486DX4/100PCI . $1495

MEDIANOTE

- Full Multimedia Performance with Built-in Double Speed CD-ROM Drive
- 8 MB RAM & 340 MB, 2.5", Hard Disk Drive
- Local Bus IDE Hard Drive Controller
- 32-bit VL-Bus Graphics Accelerator, 1 MB, Supports External Monitor up to 1280x1024
- Large 9.4 " Dual Scan ColorDisplay
- Built-in 16-bit Sound Card, Microphone & Dual Stereo Speakers
- 85-key Keyboard with Numeric Keypad
- Built-in Mini Joystick
- 1.44 MB Micro Floppy Disk Drive
- Two Type II or One Type III PCMCIA Slot
- Enhanced Serial & Parallel Ports
- Up to 3 Hours Battery & 7.2 Lbs Travel Weight

486DX/33 . . . . . $2595
486DX2/66 . . . . . $2695
486DX4/100 . . . . . $2895
DUAL SCAN TO ACTIVE MATRIX ADD $975

*Corporate & Schools PO's, Government Purchase Orders & CODs accepted. (oac) *All prices are based on check & cash only.*

CALL 818.305.5925 IN MONROVIA
818.549.1188 IN GLENDALE

MAXIMUS
"Performance to the Max"

MAXIMUS COMPUTERS INC.

MONROVIA
HOURS: MON-FRI 9-6 SAT 10-5
710 E. CYPRESS AVE
MONROVIA, CA 91016
TEL: 818.305.5925
FAX: 818.357.9140

GLENDALE
HOURS: MON-FRI 9-6 SAT 10-5
224 W. COLORADO BL.
GLENDALE, CA 91204
TEL: 818.549.1188
FAX: 818.549.1077

We accepte most major credit cards and C O D

VISA DISCOVER

IT JUST DOESN'T GET ANY BETTER THAN THIS!

PCI PENTIUM SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium Processor
- CPU Heatsink & Cooling Fan
- **16MB RAM**, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 420MB IDE Hard Disk
- PCI IDE Controller Up To 4HDD
- 2 Serial, 1 Parallel & 1 Game Ports
- PCI SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVGA Monitor, 1280x1024, .28dp, N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse

Pentium 90MHz $1795 BEST BUY!

Pentium 100MHz	CALL
Pentium 75MHz	$1775
Dx2-66MHz	$1280

UPGRADE OPTIONS:

1GB IDE HDD	$255
Total 32MB RAM	$425
Diamond Stealth 64 2MB V/D RAM	$210/$110

PCI PENTIUM MULTIMEDIA SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium Processor
- CPU Heatsink & Cooling Fan
- 16MB RAM, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- **850MB IDE Hard Disk Mode 3**
- PCI Enhanced IDE Controller Up To 4HDD
- PCI SVGA Win. Accelerator 1MB RAM, 1280x1024 Upgrade to 2MB
- 15" SVGA Monitor, 1280x1024, .28dp, N.I.
- Mid Tower Case, 101 KB & Hi-Resolution Mouse
- 4x CD ROM, Pair Speaker
- 16Bit Sound Blaster MCD

Pentium 90MHz $2265 BEST BUY!

Pentium 100MHz	CALL
Pentium 75MHz	$2245
Dx2-66MHz	$1750

UPGRADE OPTIONS:

1.0GB HDD	$175
Total 32MB RAM	$425
Diamond Stealth 64 2MB V/D RAM	$210/$110
17" Monitor	$325

PENTIUM SCSI SYSTEM

- 4-PCI Bus Master, 4-ISA Slots
- Intel Pentium 90MHz Processor
- CPU Heatsink & Cooling Fan
- 256 Fast Write Back Cache
- 16MB RAM
- 1.44MB Floppy Disk
- 1.06GB SCSI II Hard Disk
- SCSI II Controller
- 7 Bay Mid Tower Case
- 101 KB & Hi-Resolution Mouse
- No VGA Card & Monitor

Pentium 90MHz	$1950
Pentium 100MHz	CALL
Pentium 66MHz	$1800
Pentium 60MHz	$1750
Dx2-66MHz	$1255

UPGRADE OPTIONS:

Adaptec 2940	$120

FOR OUR LOCAL CUSTOMERS WE PROVIDE:

- ❑ PC Repair
- ❑ System Upgrade
- ❑ Memory Upgrade
- ❑ Network Consultation
- ❑ Network Installation
- ❑ CNE's Work For You
- ❑ Pick-Up and Delivery For You
- ❑ On Site Service

VLB MULTIMEDIA SYSTEM

- 3-VLB, 4-ISA Slots
- Intel Processor
- CPU Heatsink & Cooling Fan
- **16MB RAM**, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 540MB IDE Hard Disk Support Mode 3
- VLB Enhanced IDE Controller Up To 4HDD
- VLB SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVGA Monitor, 1024x768, .28dp N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse
- 2x CD ROM, Pair Speakers
- 16Bit Sound Card

66MHz Intel $1415 BEST BUY!

NEW! 80MHz AMD	$1430
NEW! 100MHz AMD	$1599

UPGRADE OPTIONS:

850MB HDD	$100
Total 32MB RAM	$425
Diamond Stealth 64 2MB V/D RAM	$250/$150
4x Speed CD ROM	$100

VLB STARTER SYSTEM

- 3-VLB, 4-ISA Slots
- Intel DX2-66MHz Processor
- CPU Heatsink & Cooling Fan
- **8MB RAM**, 256 Fast Write Back Cache
- 1.44MB Floppy Disk
- 420MB IDE Hard Disk
- VLB IDE Controller
- VLB SVGA Win. Accelerator 1MB RAM, 1280x1024
- 14" SVCA Monitor, 1024x768, .28dp N.I.
- Mini Tower Case, 101 KB & Hi-Resolution Mouse

66MHz Intel $1075 BEST BUY!

NEW! 80MHz AMD	$1090
NEW! 100MHz AMD	$1259

HARDWARE

HDD-IDE

420MB Quantum	$175
540MB Seagate	$190
850MB Conner	$270
1.25GB Conner	$430
1.06GB Conner SCSI	$465
250/420 Tape Backup	$140/$165
Dual 1.2 & 1.44 Floppy Drive	$85

CONTROLLER

Adaptec 1542 ISA	$180
Adaptec 2742 EISA	$250
Adaptec 2940 PCI	$205
VLB Enhanced IDE I/O	$29
PCI Enhanced IDE	$39
ISA IDE I/O	$20

ADD-ON CARD

14.4 Fax Modem	$65
14.4 Voice Fax Modem	$85
14.4 U.S. Robotics	$99

VGA & MONITOR

Diamond Stealth 64 2/4MB VRAM	$295/$450
ATi Mach 64 2/4MB VRAM	$300/$495
Diamond Stealth 64 1/2MB DRAM	$145/$195
VLB SVGA w/1MB	$69
PCI SVGA w/1MB	$89
14" SVGA Monitor 1024x768, N.I.	$210
15" SVGA, 1280x1024, N.I., EPA	$299
17" MAG DX17F, .26dp, 1280x1024	$599

MULTIMEDIA WINDOWS

SOUND CARD

16Bit Mozart	$59
SB 16 Multi CD	$75
SB 16 SCSI	$115
SB 32 Value Edition	$230
SB AWE 32 Full Pkg.	$275

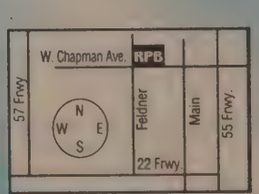
CD ROM

2x Panasonic	$115
2x Sony IDE CD ROM	$115
4x TEAC CD ROM	$230
4x Mitsumi IDE CD ROM	$199
3x NEC 510 SCSI	$250
4x Toshiba 3501 SCSI	$300
14 CD Title ('95 Grolier Encyclopedia, Atlas & Games)	$35
120 Watt Jumbo Speaker	$55

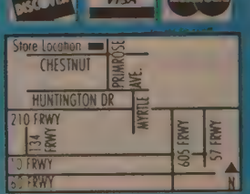
SAME DAY INSTALLATION AVAILABLE!

FREE INSTALLATION w/PURCHASE OF SYSTEM! Otherwise Hourly Labor.

RPB
Computer Systems
1627 Chapman Ave., Orange, CA 92668
Tel: (714) 978-7430
Fax:(714) 634-2963



SUPERIOR COMPUTER
825 S. Primrose Ave. Ste. #B,
Monrovia, CA 91016
Tel: (818) 301-4255
Fax: (818) 301-4256



Upgrades and custom configured available. Please call for details. Specialized in Repair and Upgrades. FREE Estimates. 1 day turnaround time. All systems carry a one year parts, five year labor warranty/72 Hour burn-in before shipping. Government & Corporate PO's Welcome. Price subject to change without notice. Not responsible for typographical errors. Visa, MasterCard, Discover and Check welcome!

Multimedia Kiosk Overcomes Designer Anxiety

INTERIOR DESIGNER REFERRAL

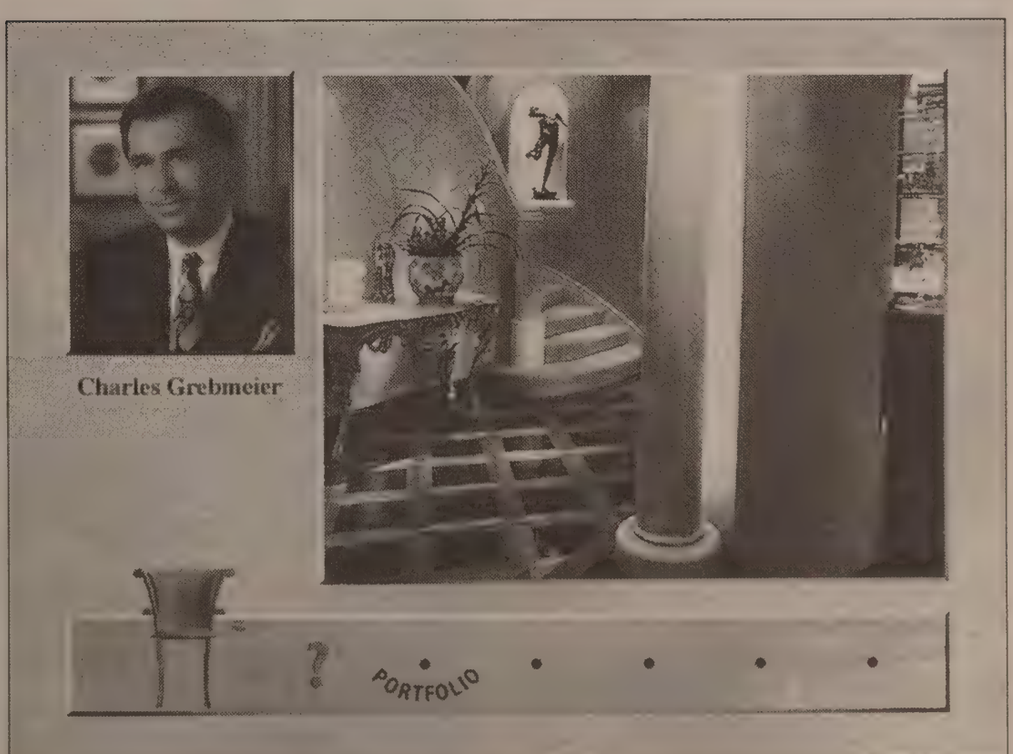
DesignFinder

Interior designers looking for new clients can have a hard time breaking through consumer fears about their profession: that the designer will be overbearing and dictatorial, too far out, too expensive.

When a Bay Area chapter of the American Society of Interior Designers set up a committee to overhaul their referral system, they looked to multimedia as a way to deliver lots of information with lots of style. The resulting DesignFinder interactive touch-screen kiosks will eventually be located in high-traffic areas like shopping malls and convention centers.

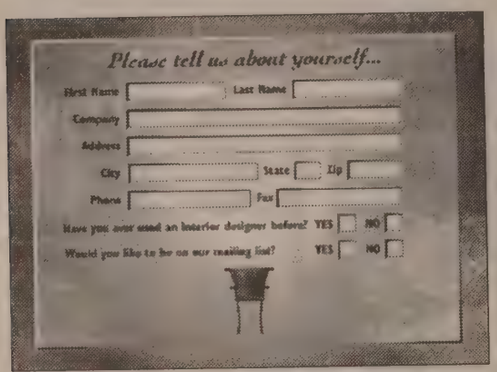
Potential clients will type in their contact information, then go through a series of checklists about the project in question. Project categories include Accessorizing a Home, Remodeling an Office, Art Consultation, and Designing a Kitchen. Style choices such as Asian Influence, Outdoor Furnishings, Contemporary, and commercial or residential specialties help narrow the field of designers.

The computer searches its database for designers who fit the criteria. Then it finds designers in the three nearest zip codes to the client, and puts a random list of three on the screen. The client can choose to see information about one of those three



BY SUSAN HUCHINSHAS

DESIGN FINDER *continued...*



designers, or scroll to see more names.

Each designer's screen includes a photo of the designer, the company name and contact info, and a hundred-word description of the business. The client can print a color sheet on any of the designers selected.

TECHNO-TOOLS PROVIDE A BETTER SERVICE

The California North chapter of the ASID has been actively marketing the value of professional design services to Bay Area consumers for several years. Before DesignFinder, says Steve Osburn, chair of the Designer Referral Committee, when someone called the ASID office for a referral, "The system was to pull a name out of a file cabinet."

The ASID staffer would attempt to match the designer's qualifications with the project, but there was no system of tracking who was referred to which jobs. "We needed to offer an equal service to all the membership in the chapter," Osburn says.

Osburn, coprincipal with Joan Malter Osburn of Osburn Design in San Francisco, had been familiar with multimedia technology since the firm had worked with engineers at Xerox PARC in 1985, designing the site and furnishings for a computer-based meeting facility called COLAB. The Osburns also presented the firm's work for Xerox at the Ted2 Conference in 1989.

Since the Referral Committee had a tiny budget, Osburn first set up a database using FileMaker Pro, which the ASID already owned. When the committee presented the database to the ASID board at a strategic planning meeting last summer, all were struck by its potential. Board President Charles Grebmeier, principal of Charles Grebmeier Design in San Francisco, realized the computerized database would give consumers a comfortable way to check out interior designers without the potential embarrassment of a face-to-face.

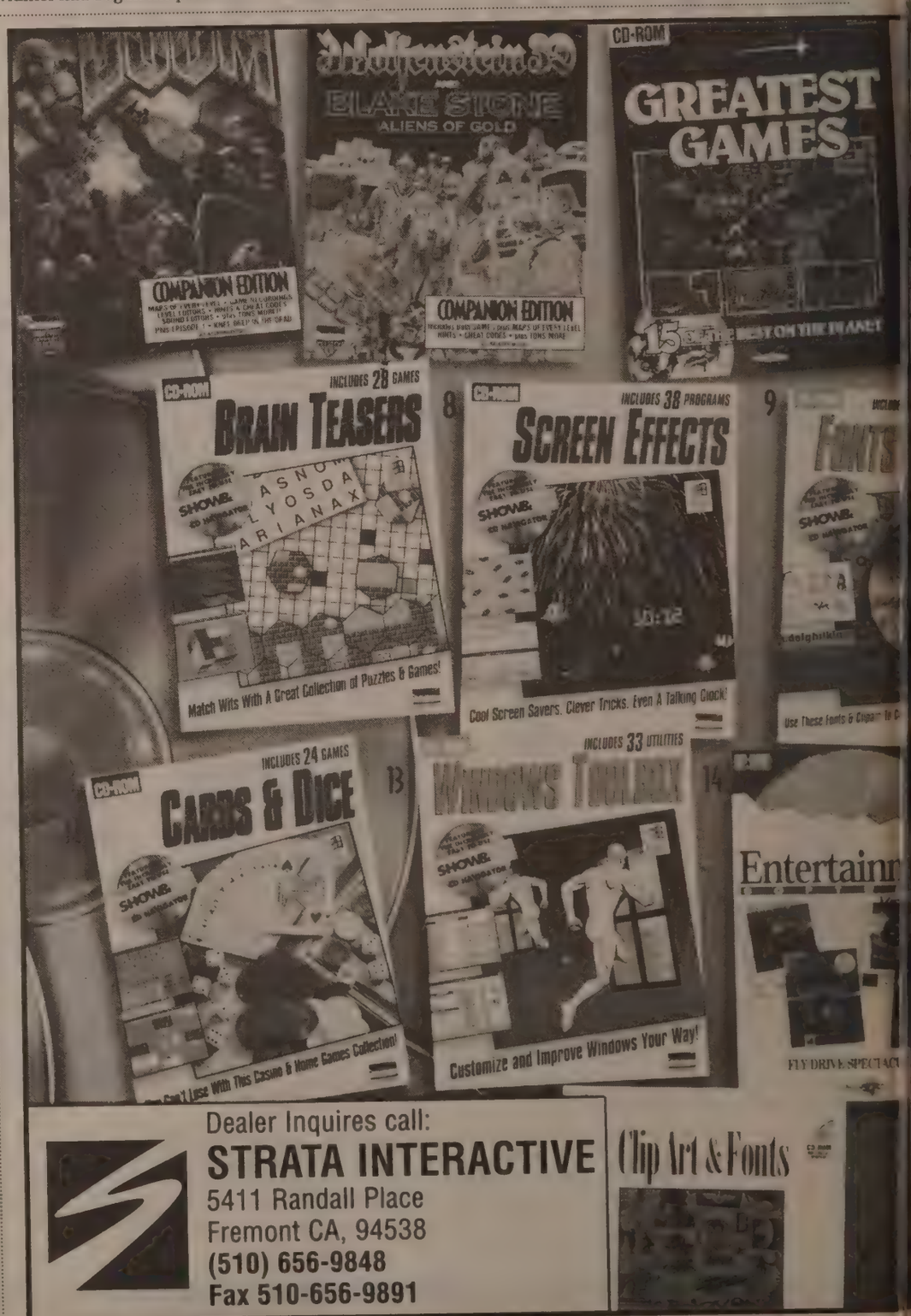
"Clients don't have to face someone on a one-to-one basis only to find out that the person doesn't have the expertise and experience to work with them," Grebmeier says. "They can do their own research. The system looked like something that worked for both parties. We went for it."

The board decided to release more funds, so that the committee could request proposals from multimedia professionals. The winning proposal came from John Widmer, owner of Wayfinder Systems in San Francisco.

THE WINNING DESIGN

Widmer had begun his professional career as a photographer and illustrator, then moved into graphic design and advertising. He got involved in information design in 1984, when he developed signage and directional graphics for the Santa Barbara Zoo. He founded Wayfinder Systems in 1993, to provide programming, graphics, and interface design for touch-screen information systems.

Working under a six-week deadline, Widmer



DESIGN FINDER *continued...*

walked the board through each step of the creation process, so they could see how he was developing the content and visual design.

Widmer's first step was to create an information schematic on paper, then put that into a skeleton program in Macromedia Director. The program simply showed text on a white screen, but all the buttons worked; the board, paper schematics in hand, could try it out and discuss alternatives.

Next Widmer designed a thematic visual element to tie the piece together. "Since this is the interior design field, the expectation is that everything is presented absolutely magnificently," he says. "I had a board of twenty-six people reviewing the design, all of them interior designers."

After paging through design magazines, Widmer chose an elegant chair as a key element which would run through the piece as a way-finder. He modeled the chair in MacroModel, then used Swivel 3-D to make it spin and fly around the screen to indicate movement through the program. There's also a gold ball which moves to identify available buttons.

Widmer designed the screen backgrounds and typographic elements. To make the interface seem warm, Widmer used texture-mapping on the 3-D elements, with plenty of wood grains. The type was given an embossed appearance by making it a slightly different color from the backgrounds and adding drop shadows. Finally, music was developed from royalty-free sound files in Widmer's library. His design goal was to allay users' possible fears of technology by filling the interface with textures familiar from the real world.

Widmer says he had no problem working with so many people, most of whom were unfamiliar with the technology or concepts of multimedia. "Because of my work with the zoo, which had twenty-six people on the board, I'm used to it and really like it. The whole trick is to let people know that what they say is being absorbed and integrated, but maybe not in the way they expect. I try to handle everyone's issues so that the piece meets their criteria."

DATABASE ISSUES

Wayfinder programmer Eric Rosene organized the second module of DesignFinder, the database. Since Widmer feels Macromedia Director is "absolutely awful" at dealing with text, Rosene used HyperCard 2.1 as the database management tool. Widmer finds that although HyperTalk, the programming language used by HyperCard, may be more complex than Director's Lingo, it's more encompassing.

The DesignFinder program must be able to sort through up to one thousand different designers, then display six hundred words in four different categories. "With HyperCard, you can handle a huge volume of data, then you can output an ASCII text file that is sorted and able to be read by Director. We

GREAT CD-TITLES
AT SUPER LOW PRICES
Available at: ELECTRONICS Fry's L.A.Tronics
FRY's & L.A.Tronics Stores
INCLUDES 26 GAMES
BOARD & STRATEGY
Games of Strategy and War for Windows!
A Great Way For The Whole Family To Learn Together!
Organize Your Fonts & Clipart, Print Envelopes, Labels & Bar Codes!
10
INCLUDES 33 GAMES
VIDEO ARCADE
Take A Break With All Your Favorites for
11
INCLUDES 33 UTILITIES
GRAPHICS & SOUND EXPLORER
Turn Your Computer Into A Multimedia Studio!
16
CD-ROM Entertainment
LINKS COLLECTORS CD
17
CD-ROM Edu·tainment
SOFTWARE
ADVANCED LEARNING FUN
CD-ROM Entertainment
Video Gambling
CD-ROM
THE ORIGINAL
LINKS
SOLID GOLD EDITION

DESIGN FINDER *continued...*

provide the text file for Director as a simple import, a complete file ready for display, rather than requiring Director to go through this process."

SYSTEM REQUIREMENTS

The DesignFinder program can run on a PC or Mac, but database update must be done in HyperCard on a Macintosh.

The kiosk display can contain a 486 PC or Macintosh with 20MB of RAM. The CPU can be a laptop, which can be pulled out and carried to presentations. A 600MB hard disk is required to store data on four hundred designers. A 14" AV monitor is permanently installed.

Widmer gave the ASID a bonus. "As long as you have the computer and the color printer, why not have the kiosk double as a printing center for marketing materials?" he thought. Widmer had designed a four-color DesignFinder promotional brochure to be used to sign up designers, as well as logos and letterhead. So he simply loaded the PageMaker files for the letterhead, labels, envelopes, and stickers onto the CPU. He says that each color cartridge for the printer costs about $30 and can print up to one thousand sheets, making this solution more cost-effective than conventional printing.

Professional and allied members of ASID will be able to advertise in DesignFinder at an expected cost of between $125 and $175 a year. The chapter plans to sell the program to other ASID chapters as a fund-raiser. Right now, DesignFinder lives in a simple box at the Showplace Design Center in San Francisco. The permanent kiosk design will be chosen in a competition sponsored by Wilsonart, a Texas-based maker of architectural laminates. The design competition will be judged by ASID members. To make an appointment to try out DesignFinder, call (415)864-1500. ■

Copyright © 1995 by Susan Kuchinskas. All rights reserved.

MEMORY OUTLET
CALL1-800- 956-8726
CUSTOMER & TECH SUPPORT (714) 373-6770

30 PIN SIMMS			72-PIN SIMMS			CPU
SPEED	60	70	80	SPEED	60	70	80	PENTIUM 100
1X9.3	42	40	38	1 MB	45	42	40	PENTIUM 90
1X9.9	45	44	42	2 MB	98	95	90	PENTIUM 66
1X8.2	32	30	29	4 MB	165	159	155	PENTIUM 60
1x8.8	40	38	36	8 MB	335	329	320	486 DX 100
4X9.9	149	148	146	16 MB	595	575	565	486 DX 2-66
4X8.8	135	134	132	32 MB	1299	1275	1250	486 DX 33

D-RAM	CACHE	VIDEO
1X1	32X8	256X4
256X4	128X8	256X16
256X1	8X8	128X8
1X4	64X1	256X8

SPECIALIZED MEMORIES AVAILABLE

PRINTER MEMORY
APPLE IBM
BROTHER KONICA
PANASONIC CANON
OKIDATA EPSON
HP SHARP

IBM TOSHIBA Apple HEWLETT PACKARD LEADING EDGE TI
NOW AVAILABLE SPECIAL ADAPTER TO CONVERT 30pin SIMM to 72pin SIMM! CALL FOR DETAILS!!
NEC COMPAQ AST ZENITH DELL

ALL PRICES ARE SUBJECT TO CHANGE. FAX P.O. AT (714) 373-6768
ABCOM COMPUTER PRODUCTS
15561 PRODUCER LANE UNIT I&J HUNTINGTON BEACH CA. 92649
SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE FOR RETURNS ON REFUSED PACKAGES WITHOUT PROPER RMA. ON NON DEFECTIVE PARTS NO RETURNS ACCEPTED AFTER 10 DAYS OF SALE. NON DEFECTIVE RETURNED MERCHANDISE SUBJECT TO 20% RE-STOCKING FEE. ALL RETURNED MERCHANDISED SHOULD BE IN ITS ORIGINAL UNUSED CONDITION AND SHOULD BE ACCOMPANIED WITH ORIGINAL INVOICE WARRANTY PROVIDED FOR REPLACEMENT OF PARTS ONLY. ALL TRADE MARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS

use with or without keyboard
POCKET SIZE 486
Available with:
Ethernet
Coprocessor
Additional RAM
486 / 25mhz
4Mb Ram
40/80 Mb Hard Disk
96/24 Fax Modem
Cordless Mouse/Pen
keyboard & ext kb port
parallel & serial ports
external VGA port
3.5" floppy drive
AC Adapter & charger
battery
carrying case
1 yr warranty
only 2.2 lbs
perfect for students
—use pen &/or keyboard— recognizes your writing!
FROM $499
made by IBM USA
ACCESSORIES AVAILABLE
call (800)359-DEAL
B-WARE
11684 Ventura Blvd. #497
Studio City, CA. 91604

SERVICE SUPPORT QUALITY & PRICE

PENTIUM

Intel 64 Bit Pentium Processor

- 256K Ultra Fast Cache
- 8MB RAM Installed
- Intel Math Coprocessor
- 1.44MB FD
- 540MB HD 11ms
- 2S/1P/1G
- Hi-Res. Mouse
- 101 Keyboard (Japan)
- Enhanced IDE PCI FD/HD Controller
- .28 N/I Energy Saving SVGA Color Monitor
- Windows Accelerator PCI Super VGA Card W/1MB
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Full Tower Case
- 230 W P/S (110/230V) U.L.
- A.C. Surge Protector
- 14.4/14.4 Fax/Modem

Pentium 60MHz.....$1649
Pentium 66MHz.....$1749
Pentium 90MHz.....$1899

486 VESA Local Bus

Pentium Overdrive for Future Upgrade

- Energy Saving Green Function
- 256K Ultra Fast Cache
- 3 VESA Local Bus Slot
- 4MB RAM Installed
- Built-In Math Coprocessor
- Hi-Res Mouse
- 8K Cache Int.
- 2S/1P/1G
- 1.44MB FD
- 425MB HD 12ms
- 32 Bit VESA Local BusFD/HD Controller
- 101 Keyboard(Japan)
- .28 N/I Energy Saving SVGA Color Monitor
- 32 Bit VESA Local Bus Super VGA Card W/1MB (Windows Accelerator, 1280x1024, 16.7M Color)
- Clock/Calendar w/B.B.U.
- Operation Manual
- Digital Mid-Size Tower Case
- 230W P/S (110/230V) U.L.
- 9600/2400 Fax/Modem

Intel 33/ AMD 40.....$1049/ $1079
AMD 2-66/ AMD 2-80.....$1099/ $1199
Intel 2-66/ Intel 4-100.....$1129/ $1399

486 MULTIMEDIA SPECIAL

- Energy Saving Green Function
- INTEL Pentium Overdrive for Future Upgrade
- 256 Ultra Fast Cache
- 3 VESA Local Bus Slot
- 4MB Ram Installed
- Math Co-Processor Built-In
- 8K Cache Int.
- 2 Serial, 1P, 1G
- Hi-Res Mouse
- 1.44MB FD
- 32 Bit Vesa Local Bus IDE FD Slot HD Controller
- 425MB HD 12ms
- 101 Keyboard (Japan)
- .28 N/I Energy Saving SVGA Color Monitor
- VESA Local Bus Card w/1MB
- D/S Mitsumi CD ROM
- Stereo 16 Bit Sound Card
- Microphone
- Encyclopedia & 16 CD Titles
- Loaded Multimedia Case: Speakers, Volume, Balance, Treble, Bass, Earp., Misc.
- 9600/2400 Fax/Modem

Intel 33/ AMD 40.....$1349/ $1379
AMD 2-66/ AMD 2-80.....$1399/ $1499
Intel 2-66/ Intel 4-100.....$1429/ $1699

MOTHER BOARD QTY 10

486SX-33 W/CPU	$99
VLB 486-33/100 W/256K	.84
EISA/VLB 486-33/66 W/256K	.159
Pentium/PCI 60/66 W256K	.164
Pentium/PCI 90/100 W256K	.199

CASE & P/S

Digital Mini Tower W/200W U.L.	$37
Digital Med. Tower W/230W U.L.	.55
Digital Full Tower W/230W U.L.	.67
MULTIMEDIA W/230W U.L.	.94

HARD DRIVE QTY 10

W D 425MB 12ms IDE	$189
W D 540MB 11ms IDE	.229
W D 730MB 10ms IDE	.289
W D 850MB 10ms IDE	.319
W D 1080MB 10ms IDE	.429

FLOPPY DRIVE

1.2MB TOSHIBA	$40
1.44MB MITSUMI	.31
CD-ROM	CALL

MONITOR/ CARD QTY 10

Miracle 14" P/W SVGA	$89
Everview SVGA .28 N/I Green	.204
Everview 15" SVGA .28 N/I Green	.289
Supercom 17" SVGA N/I	.559
MGP	.9
HMC 256K SVGA	.23
Windows Acc. 1MB SVGA	.53
Windows Acc. 1MB VLB	.63

KEYBOARD

Mitsumi 101/102 Enhanced	$14
Spanish 101/102 Enhanced	.19

NETWORK QTY 10

8 Bit Arcnet Star	$39
16 Bit Arcnet COMBO	.47
16 Bit Ethernet Coax	.24
16 Bit Ethernet Combo	.29
4 Port Passive Hub	.4
8 Port ACTIVE HUB	.119
8 Port 10 Base T Hub	.114

FAX/ MODEM/ MOUSE

PS.2 Mouse	$4
9600/2400 Int. Fax/Modem	.24
14.4/14.4 Int. Fax/Modem	.54

*ADD 3% QTY LESS THAN 10
*ADD 10% QTY LESS THAN 5

DEPOT REPAIR

- Fast, Reliable & Guaranteed
- Volume Accounts, Call For Special Pricing!!!
- Call For Other Depot Solutions To On-Site Maintenance

DATA GENERAL • BLOWER MOTORS • SPINDLE MOTORS • LINEAR MOTORS • R/W HEADS • DISK DRIVES • TAPE DRIVES CRTs • PRINTERS • CPUs MEMORIES • COMMUNICATIONS CAD/CAM • TEKTRONIX • MITSUBISHI • V.M.I. • RAMCOM
PERSONAL COMPUTER • IBM-PC/XT/AT & COMPATIBLE COMPAQ • LEADING EDGE • APPLE • AST • WYSE • LINK

NOTEBOOKS

Monochrome

486SX-25M	$1349
486SX-33M	$1279
486DX-33M	$1399
486DX2-66M	$1899

Dual Scan Color

486SX-25C	$1499
486SX-33C	$1549
486DX-33C	$1599
486DX2-66C	$1849

SYSTEMS INCLUDE:

- 4MB Memory
- 210MB HD
- 1.44MB FD
- Battery
- AC Adapter
- Built-in-Trackball Mouse
- Padded Carrying Bag w/Shoulder Strap
- Microsoft DOS 6.22

- FULL ONE YEAR WARRANTY
- LIFETIME CUSTOMER SUPPORT
- BUY DIRECT & SAVE

GATETRONIX Control Systems Inc.

Hardware & Software Services
15541 Broadway Center Street, Gardena, CA 90248
BROADWAY CENTER BUSINESS PARK
(corner of Broadway & 157th St.)

Tel: (310) 715-6086
Fax: (310) 715-6649

MON-FRI. 9AM-6PM

*All trademarks are acknowledged
**All GCS Systems are fully assembled & tested.
Prices subject to change without notice.

GCS/ALL Micro Services

Valencia Industrial Park
27720 Avenue Scott
Unit 180
Valencia, CA 91355

Tel: (805) 257-1926
Fax: (805) 257-1925

WE DO: NOVELL • LANTASTIC • CUSTOMIZE • UPGRADE

GTA / MICRO CITY

Smart selling since 1984!

THE BEST PRICES/SERVICE YOU'LL FIND ALL YEAR!

HP LASERJET 4L PRINTER

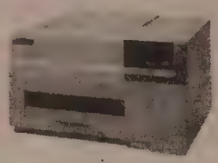
- 300 dpi print resolution
- HP's lowest priced LaserJet printer ever
- Small 14" by 14.5" footprint
- Equipped with 26 built-in scalable fonts for high quality documents.

NEW LOW PRICE!

$499.00!

HP COLOR LASERJET PRINTER

- Features eight full colors & millions of halftones
- Uses direct-to-drum imaging for exceptional print registration
- Fast color printing at up to 2 pages-per-minute
- Up to 10 pages-per-minute in basic black.



$CALL!

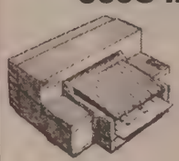
HP LASERJET 4V PRINTER

FAST!

- Features a resolution of 600 dpi
- Prints 16 pages-per-minute; the fastest LaserJet!
- Ability to print on wide-format 11" x 17" paper

1899.00!

HP DESKWRITER / DESKJET 560C INKJET PRINTER



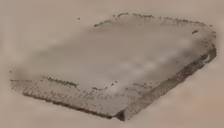
- HP's exclusive built-in ColorSmart technology
- Features resident dual cartridges for black-and-color printing at the same time,
- Clear 600 x 300 dpi black printing
- A variety of internal and scalable fonts!

$539.00!

ARE YOU READY FOR

'95!

HP SCANJET IICX COLOR SCANNER

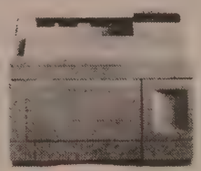


- True 24-bit color, grayscale and text scanning
- Optical resolution of 400 dpi
- 1600 dpi using enhanced resolution technology!

$759.00*

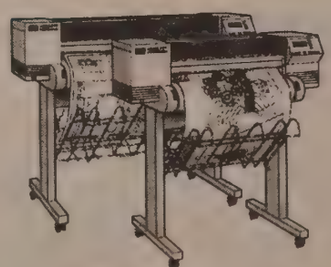
** AFTER $150.00 REBATE*

HP LASERJET 4 PLUS PRINTER

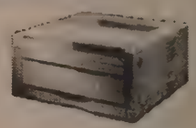


- 600 dots-per-inch output
- ***New 12 page-per-minute print engine***
- 45 internal scalable typefaces
- 2MB of standard memory (expandable to 32MB).

$1369.00!



HP LASERJET 4P PRINTER



- Features true 600 x 600 dpi printing
- Comes with 45 built-in scalable typefaces
- Enhanced HP PCL5
- 2 MB of standard memory (exp. to 26MB).

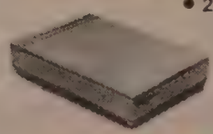
$915.00

HEWLETT PACKARD

Authorized Reseller

We are also an authorized HP Plotter Dealer! Call us for amazing pricing on HP's new line of DesignJet 650C inkjet plotters.

HP SCANJET 3P SCANNER



- 256 grayscale and text scanning
- Optical resolution of 300 dpi
- 1200 dpi using enhanced resolution technology
- Comes with Calera WordScan OCR software

$479.00

ALL ADVERTISED PRICES REFLECT A 2% CASH DISCOUNT - GOOD ONLY WITH AD!

CERRITOS	SAN JUAN CAPISTRANO	VAN NUYS	MONTEREY PARK	SAN DIEGO
(714) 735-0444	(714) 489-0228	(818) 781-0600	(818) 300-8116	(619) 560-9366
FAX (714) 735-0291	FAX (714) 489-0691	FAX (818) 781-4203	FAX (818) 300-0081	FAX (619) 560-9316

HOURS: Mon-Fri 9:00am - 6:00pm
Sat 10:00am - 5:00pm *(Cerritos CLOSED)*

ALL PRICES REFLECT A 2% CASH DISCOUNT - ASK ABOUT MICRO CITY'S REVOLVING CREDIT PLAN! MASTERCARD & VISA ACCEPTED
Layaway plans are available for some items.
* Prices good thru February 24th, 1995 *

PINNACLE PERFORMANCE FOR '95!

AAPOGEE

intel inside

SYSTEMS BY GT/MICRO CITY

- Proven Performance Track Record
- Engineered for Maximum Upgradability
- Optional 3 Year On-site Service
- We Accept Corporate and Government Purchase Orders

AAPOGEE 90

- Intel Pentium 90MHz
- 256k Cache ♦ 8MB RAM
- Medium-Tower Case
- 1.44MB Floppy ♦ ***540MB*** HD
- Diamond 64-bit SVGA PCI Video Card w/2MB
- 101 Keyboard
- Everview ***15"*** SVGA NI Monitor

$2229.00

AAPOGEE DX2/66

- Intel 486DX2/66 ♦ 256k Cache
- 4MB RAM
- Mini-Tower Case
- 1.44MB Floppy ♦ ***540MB*** HD
- VL/IDE Controller
- Cirrus Logic VLB Video Card w/1MB
- 101 Keyboard
- Everview 14" SVGA NI Monitor

$1159.00

Options include Hard Drive size, Double and Quad speed CD-ROM Drives, 16-bit sound, extra RAM, high-speed fax/modems, + MORE!
Call us for all of your customizable alternatives!

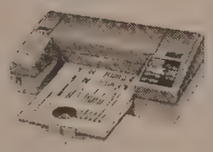
AAPOGEE NOTEBOOK

- Intel 486DX2/66MHz processor
- Local Bus Design
- 4MB RAM (exp. to 20MB)
- 9.5" Dual-scan *COLOR* display
- 250MB Hard Drive ♦ 2 PCMCIA slots
- Built-in Pointing Device
- 2 serial ports and 1 parallel port
- External monitor & keyboard support
- DOS 6.2 & Windows 3.11

$2029.00

Options include: Hard Drive size, PCMCIA slots, 14.4 fax/modem, 16-bit sound, extra RAM and More!! Call!

EPSON STYLUS 800 PLUS INKJET PRINTER



- **High definition inkjet printing.** Exclusive EPSON Stylus technology provides the best inkjet printing available at 360 dpi resolutions.
- Two year limited warranty.
- Built-in, out of the box compatibility with Windows

$205.00

EPSON COLOR STYLUS INKJET PRINTER	*$545.00*
EPSON ACTIONLASER 1100 LASER PRINTER	*$489.00*

OKIDATA OL400e LED PAGE PRINTER

LASER QUALITY!

- 44 built-in fonts
- Great looking output at 300 dpi
- Compact size and sleek design
- Compatible with virtually all software applications!

$399.00

OKIDATA OL410e LED PAGE PRINTER	*$579.00*
OKIDATA ML591 24 PIN DOT MATRIX PRINTER	*$549.00*
OKIDATA ML320 9 PIN DOT MATRIX PRINTER	*$319.00*

E-TECH BULLET 14.4 FAX/MODEM

- Send & receive data and faxes at speeds up to 14,400 bps.
- Features v.42 data error correction and data compression.
- Includes cables, & Quick Link II for DOS & Windows.

$59.00!

We know that you don't always have the time to call us for pricing & availability information, that's why we offer you two easier alternatives:

YOU CAN FAX US YOUR QUOTES AT:

714-739-8291

OR E-MAIL US ON THE INTERNET AT:

ag915@lafn.org

GT/MICRO CITY SM

Smart selling since 1984!

The Intel Inside logo is a registered trademark of Intel Corporation Inc.

MACRO SYSTEMS

PENTIUM 90MHz PCI $1899
PENTIUM 66MHz PCI $1599
VLB 486DX2/66MHz $1075
VLB 486DX/33MHz $999

256K Cache
4MB RAM
420MB Hard Drive
1.44MB Floppy Drive
PCI or VLB IDE Controller
2 Serial/1 Parallel/1 Game Port
PCI or VESA 1MB SVGA Video Card
14" SVGA Monitor
Tower w/230W Power Supply
101 Enhanced Keyboard
Serial Mouse

SOUTH COUNTY'S BEST!

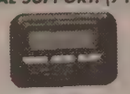
MACRO Technologies

23151 VERDUGO, SUITE 102 • LAGUNA HILLS, CA 92653
TEL: (714) 580-1822 • FAX: (714) 770-4950
TECHNICAL SUPPORT: (714) 859-1014

Pagers & Cellular Phones Now Available!

LA CELLULAR — AIRTOUCH

STARTING AT $9.00!



Motorola Pagers $49.95!

Service Starting at $34.99 p/mo

Motorola Flip $99

VISA — MasterCard

Novell Certified NetWare Engineer

CONSULTING, SALES, SERVICE, TRAINING & REPAIRS

Financing & Leasing Available

SPECIAL!

560MB IDE HDD $209
420MB IDE HDD $185
4862-66MHz w/CPU $169
4862-50MHz w/CPU $105
CD ROM Double Spd. $125

MOTHERBOARDS

PCI Pentium 90MHz & CPU $935
PCI Pentium 66MHz & CPU $749
PCI Pentium 60MHz w/256K & CPU $689
PCI-VLB 486DX2-66MHz w/256K & CPU $375
VESA L/B 486DX2-80MHz w/256K & CPU $339
VESA L/B 486DX2-66MHz w/256K & CPU $315
VESA L/B 486DX-50MHz w/256K & CPU $349
VESA L/B 486DX2-50MHz w/256K & CPU $249
VESA L/B 486DX-40MHz w/256K & CPU $241
VESA L/B 486DX-33MHz w/256K & CPU $235
VESA 4862-66MHz & CPU $159
486DLC-40MHz w/Math Co & CPU $155
486SX-25MHz & CPU $159
ISA 386DX-40MHz & CPU $105

HARD & FLOPPY DRIVES

1.2FDD $52
1.44FDD $44
210MB IDE HDD $139
270MB IDE HDD $165
420MB IDE HDD $195
540MB IDE HDD $229
820MB IDE HDD $345
1.0GB IDE HDD $489
290MB SCSI HDD $239
540MB SCSI HDD $299
1.0GB SCSI HDD $589
1.7GB SCSI HDD $969

VIDEO CARDS

MGP $15
SVGA 256K 16-Bit $32
SVGA 1MB 16-Bit $62
SVGA 1MB Windows Accelerator Card $67
Diamond Stealth 24-Bit 1MB VLB $157
Diamond Viper VLB 2MB VRAM SVGA $339
Diamond Stealth PCI 1MB $155
VESA Local Bus 1MB SVGA S3 Chip $79
Diamond Viper PCI 2MB VRAM $299
Diamond Stealth 64 PCI 4MB VRAM $495

CALL FOR ADDITIONAL OPTIONS!

CONTROLLERS

IDE w/ I/O (2S/1P/1G) $23
IDE 2FD/2HDD $18
I/O (2S/1P/1G) $17
PCI IDE Controller $29
VESA Local Bus IDE w/I/O Controller $27
Adaptec 1522 SCSI II Compatible Card Only $99
Adaptec 1542CK SCSI w/Bus Master & Kit $279
Adaptec 2742K EISA 32-Bit SCSI w/Kit $395
Adaptec 2842AK VLB SCSI-2 Controller w/Kit $259
PCI SCSI-2 Controller $145
Adaptec 2842 VL SCSI-2 ..... $289
Adaptec 2940 PCI SCSI-2 PCI $329

MONITORS

14" SVGA 1024x768, .39dp $195
14" SVGA 1024x768, .28dp $207
14" SVGA NI 1024x768, .28dp $235
15" SVGA NI 1024x768, .28dp $325
17" SVGA NI 1024x768, .28dp $625
MAG 15" SVGA 1280x1024, .28dp $469
MAG 17" SVGA 1280x1024, .28dp $699
NEC 4FG 15" SVGA 1280x1024, .28dp $769
NEC 5FG 17" SVGA 1280x1024, .28dp $1330
Sony 15SF 15" SVGA .25 Trinitron $455
Mono 14" Monitor $95
Mono 14" VGA Monitor $105

MEMORY AND PRINTER MODULES AVAILABLE!

KEYBOARDS

101 Keyboard $25
Focus 2001 ..... $37
Focus 9000 ..... $57
Keytronic KT2000 ..... $32
Fujitsu 4700 ..... $41
Maxi Switch 101 ..... $27

CPU's

Intel Pentium 90MHz CPU $699
Intel Pentium 66MHz CPU $549
Intel Pentium 60MHz CPU $469
Intel 486DX2-66MHz CPU $209
AMD 486DX2-80MHz CPU $299
AMD 486DX4-100MHz CPU $369

CALL FOR ADDITIONAL CPU & MEMORY PRICING!

MULTIMEDIA

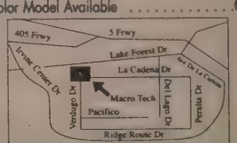
2x Speed CD ROM $129
2x Speed SCSI CD ROM $159
4x Speed CD ROM $219
16 Bit Sound Card $74
16 Bit SCSI Sound Card $109
25W Powered Speakers $39
CD ROM Software ..... CALL

MISCELLANEOUS

14.4 Internal Fax Modem $69
Colorado 250MB $175
Conner 250MB w/ Tape $155
Conner 420MB w/ Tape $189
Microsoft Compatible 3-Button $17
Microsoft Serial Mouse (NEW!) $39
Microsoft Trackball Mouse $49

CHASSIS

Desktop AT w/200W $49
Mini Tower w/200W $44
Mid Tower w/230W $65
Full Tower w/230W $79
Black Color Model Available ..... CALL



NOVELL NETWORKS **NOTEBOOKS AVAILABLE!**

TEL: (714)580-1822

BUSINESS HOURS:
M-F 9:00AM TO 5:30PM
All prices subject to change without notice.

DMS-MEMORY UPGRADE SPECIALISTS! 714/821-3354

STANDARD SIMMS

1x3-60		$39
1x3-70	B/W/CRM	35
1x3-80		34
1x9-60		42
1x9-70		37.50
1x9-80		39
1x8-70		38
1x9-100		31
4x9-60		142
4x9-70	Logic Parity	125
4x9-80		129
4x9-70		137

LOGIC 72-PIN SIMMS

1x36-70	Logic Parity	$152
2x36-70	Logic Parity	309
4x36-70	Logic Parity	475

PARITY 72-PIN SIMMS

256x36-70	(1MB)	$55
512x36-70	(2MB)	89
1x36-70	(4MB)	159
1x36-60	(4MB)	165
2x36-70	(8MB)	329
2x36-60	(8MB)	339
4x36-70	(16MB)	519
4x36-60	(16MB)	529
8x36-70	(32MB)	1095
8x36-60	(32MB)	1109
16x36-70	(64MB)	2219
16x36-60	(64MB)	2279

NON-PARITY 72-PIN SIMMS NON-PARITY

1x32-70	(4MB)	$147
1x32-60	(4MB)	149
2x32-70	(8MB)	295
2x32-60	(8MB)	309
4x32-70	(16MB)	465
4x32-60	(16MB)	479
8x32-70	(32MB)	925
8x32-60	(32MB)	935
16x32-70	(64MB)	1910
16x32-60	(64MB)	1945

Prices & Delivery Subject To Change W/Out Notice. Shipping & handling charges are not refundable. All returns require RMA number & copy of original invoice. No refunds or exchanges after 15 days. Purchaser must pay for shipping & insurance for all returns. Restocking fee 20% on non-defective returns & goods must be in original resaleable condition. All trademarks are property of their respective owners. Not responsible for typographical errors.

DESKTOP MEMORY

	4MB	8MB	16MB
APPLE:			
QUADRA 700, 900, 950	159		519
QUADRA 800, 840AV	159	305	519
QUADRA 605, 610, 650	155		519
CENTRIS 610, 650, 660 AV	155	289	519
PERFORMA 450, 460, 466, 467, 475, 550, 600	155	289	519
AST:			
PREMIA 4/33, 336 50d, 66d	169	339	539
ADVANTAGE 1 PLUS 486 SERIES	155	305	479
ADVANTAGE 1 PRO 486/DX33, SX25	155	305	479
BRAVO 486LP, LCII, LC SERIES	155	305	479
PREMIUM II-SX, SX16, SX20	155	305	479
PREMIUM 486 (ALL)		CALL	
COMPAQ:			
PROLINEA MT 4/33 4/66, 4/50, 4/66	165	329	539
PROSIGNIA 486/33 486/DX2-66	165	329	539
PRESARIO 800L 600, 400 SERIES	165	329	539
PROLIANT (ALL)	165	329	539
DESKPRO (ALL)		CALL	
DELL:			
PRECISION 486	155	289	479
IBM:			
PS/VALUEPOINT 486(ALL) 433SX/SI, 433DX/SI	165	335	539
PREMIER PS/2 76, 77, 56	165	335	539
57 ULTIMEDIA M77	165	335	539
PS/1 WILLOW(ALL)	165	335	539
PS. 1 CONSULTANT	165	335	539
PS/1 ESSENTIAL	165	335	539
PS/1 ADVISOR	165	335	539
PS/2 56, 66, 70, 95XP	165	335	539
ZENITH:			
Z486/25E		CALL	
Z-SERVER (ALL)		CALL	
Z-SELECT100		CALL	

NOTEBOOK MEMORY

	4MB	8MB	16MB	32MB
ACER:				
ACERNOTE 750, 735, 769	209	399	699	
ALR:				
FLYER 32XX	75(1MB)	205	595	
ALTIMA:				
VIRAGE		205	649	
LSX	139	205		
NB486		205	649	
AMBRA:				
NC 425SL	205	349		
N100	205	379	679	CALL
SN SERIES	205		669	
APPLE:				
POWERBOOK 520,/C, 540,/C	205	379	669	
POWERBOOK 140, 145B, 170, 180, 160, 165, 180C, 165C	175	299	CAL	
AST:				
ASENTIA 900N	205	379	649	
POWEREXEC 486SL/33	195		629	
BRAVO NB/EXPLORER	195		629	
PEN EXEC	129(2MB)		209(4MB)	
AT&T:				
AT&T EXPAND 318i	209	409	789	
AT&T SAFARI 3151	229			
CANON:				
INNOVA 486	115(2MB)	205(4MB)	349(8MB)	
INNOVA BOOK 10		205	669(16MB)	
NOTEJET NOTEBOOK	129(2MB)	205(4MB)	349(8MB)	
NOTEJET 486(BN22, BN100, BN120)	195		355(8MB)	
NOTEJET II	189	349		
COMPAL:				
TS3800	195	385	735	(20MB)
COMPAQ:				
CONCERTO 425, 433	189	369	649	
CONTURA 4/25, C, CX	189	339	639	
CONTURA 400c	205	389	769	
LTELITE 4/25, C	189	349		
COMPAQ AERO	189	339	699	
CTX:				
EZBOOK	205	385		
DELL:				
LATTITUDE XP SERIES	195		649	
LATTITUDE 433	195		649	
32N+ 325N 325/NC	105(2MB)			

	4MB	8MB	16MB	32MB
EPSON:				
ACTION NOTE 500C	209			
NBS3	209			
NBSL	209	339		
EVEREX:				
STEPNOTE	205		619	
GATEWAY:				
COLORBOOK	209		689	
HANDBOOK	209		689	
NOMAD/NOMAD N	229		895	
IBM:				
THINKPAD 755/c, 750c	199	389	795	1395
THINKPAD 300		369		
THINKPAD 700, 720, CL57SX	195	365		
THINKPAD 500	205	379		
THINKPAD 350/C	195	339	589	
PS/NOTE 2618	195	349	585	
PS/NOTE 182, N82	209	349		
MIDWEST MICRO:				
ELITE SOUND BOOK	215	465	CALL	
NEC:				
ULTRALITE VERSA E/M/V (3.5V)	199	369	719	
ULTRALITE III, SL, 25C	205	369		
ULTRALITE VERSA S-SERIES	189	389	649	
PACKARD BELL:				
STATESMAN	105	379		
PANASONIC:				
CF380/480	119	205	309(6MB)	
CF170/270/370	129			
SAGER:				
3600		395	695	1295
6500	209		695	
7500	209	395	695	1295
SAMSUNG:				
NOTEMASTER 16/25	119(2MB)	219(4MB)	339(6MB)	
SHARP:				
7700/7750/8150/8650	209		749	
T.I.:				
TRAVELMATE TI 4000E	205		859	
TRAVELMATE TI 4000M (NEW)		205	859	
TRAVELMATE TI3000 (2MG)	99			
TRAVELMATE TI2000 (1MG)	79			
TOSHIBA:				
T1950, 1900, T1900CT	195	379	745	
T4700 (NEW), T4800 (NEW)	195	379	745	
T6400, 6600	195	379	745	1395
T1850 C, 1800, 2200SX	185	339		

	4MB	8MB	16MB	32MB
T2000SXE	195	339		
PROTEGE 3400	189	369	649	
PROTEGE 2400	195	389	699	
TWINHEAD:				
SLIMNOTE E 486DX	209		749	CALL
SLIMNOTE 1/5 SERIES	209		749	
ZENITH:				
Z-STAR 433VL		379		
Z-NOTE	205	379	679	
Z-LITE 425LSUB	119(2MB)			
ZEOS:				
COLORNOTE	209		689	
FREESTYLE	219		699	

PRINTER MEMORY

	2MB	4MB	8MB
APPLE:			
PRO 810	219(4MB)	429(8MB)	
CYRIX FASTMATH:			
MATH CO-PROCESSOR			
CYRIX DX40		49	
CYRIX SX33		45	
EPSON ACTION LASER:			
1500, 1000	129		
HEWLETT PACKARD:			
HP 4, 4M	80	155	339
HP 4P, 4MP	70	145	285
HP 4L, ML (1MG ONLY)	$55		
HP 550, C, 560, C (256K ONLY)	$45		
HP III/IIID	105	159	
HP III, IIIP	105	159	
OKIDATA:			
400	105		
400E 4-10E	119	209	
PANASONIC:			
KX 4410 4430	109	179	
KX 4420, 4450	139	219	
KX 4400, 5400	149	209	
KX 4440, 5410	149	249	

CALL FOR MORE PRINTER/MEMORY PRICES!

UNIVERSITIES, GOVERNMENT AND CORPORATE P.O.'s WELCOME!

D.M.S. 2622 W. Lincoln Ave., Suite 104 Anaheim, CA 92801
714/821-3354 • FAX 714/821-3361

Telecommuting *continued...*

continued from page 70

for technical and industrial applications (CAD/CAM/CIM, plant control, simulation).

SAT—Research center for automation techniques.

SYSTEMS TECHNIQUES & AUTOMATION—Research center for systems design and automation, systems engineering, software technology, flexible manufacturing, CASE-environments.

SIEMENS PSE—Software development group of Siemens, environmental technologies, scientific software, communication technologies, automation, traffic engineering, technological service.

SOFT WAREHOUSE Europe—Marketing of computer algebra system Derive, software for mathematics education.

UNI SOFTWARE PLUS—Computer mathematics, symbolic computation, software engineering, soft automation; products, projects, training.

UNSELD + PARTNER—Discrete simulation.

WESELY, Mag. Raimund—Designer.

For most companies and institutes, the main reason to move into the Hagenberg Software Park is to join a group of highly trained experts all pursuing research and activities centering around software. Members of the group expect and find a certain atmosphere in which one can discuss problems and ideas with a receptive, knowledgeable audience of people.

Being with a group of other software experts also makes cooperative and consultative projects relatively easy to undertake. In addition, highly trained programming and software engineering students are available from the different institutes.

There are other advantages, too, such as sharing a common pool of highly advanced infrastructure, which includes everything from specialized telephone services to electronic classrooms. These people are in regular—and sometimes hourly—touch with each other through email, shared files, and other forms of electronic cooperation. Even though they often pursue individual or small-group projects, they constantly feel themselves to be a part of a larger, like-minded community. And, of course, all the resources of such a community are readily available to them, not only online, but within a short walking distance.

Not everything is perfect, of course. At present, Hagenberg is somewhat short of hotels, shops, and other places for people to gather and enjoy themselves. However, members of the community are cheerfully working to overcome these problems, and future growth within the Hagenberg community will naturally encourage more hotels and shops to open there.

Hagenberg community members expect the community to expand in the future as new members are attracted by the area's present facilities and knowledge environment, as well as by booths at important exhibitions, workshops, and seminars which are jointly sponsored by the community's present members.

Visitors are welcome, and those interested can contact the Hagenberg Software Park via any of the organizations based there. There is no established "acceptance" or application process. To become a member of the community, one merely has to rent an office within community boundaries, or join with one of them via telecommuting.

Telecommuting schedules should be individually tailored to provide a **satisfying balance** of time spent at the telecenter and the main office.

So-called "Teleworking Partners" are companies that do not have an office in the software park, but like to be considered one of the members of the community. Many small enterprises, not yet at the stage where they can afford an office at Hagenberg, are "joining" this way at first.

So far, only three companies have left the community: two because they were very small and eventually went out of business; a third because it found the community too small and too remote from other population centers.

For more information about the Hagenberg Software Park, contact Maria Kreindl or Anita Zwettler, information secretaries, by telephone (07236)3343-55, or fax (07236)3769. (These are local numbers only. Contact your international operator for prefix numbers to dial.)

(For their help in preparing this report, many thanks to Austrians Sabine Stifter—*Sabine.Stifter@risc.uni-linz.ac.at*—and Christian Leeb—*Christian.leeb@imc.imc.umi-at.at*—who are actively involved with the Hagenberg Software Park.)

US Government Recognizes Impact Of "Doing It"

Although the favorable and unfavorable impact of telecommuting on those doing it—or working with those doing it—has long been discussed among consultants and telecommuters in the field, it's refreshing and exciting to see the US government also getting the message. In fact, the feds are ramping up a major telecommuting conversion effort, dubbed "Flexiplace," which we have previously discussed in this space. Through the broadening acceptance and success of Flexiplace, your federal government is now en route to becoming the largest employer of telecommuters in the US and the world.

Not only are agencies of your government creating a climate in which telecommuting is a more common and acceptable method of accomplishing work, they are training tens of thousands of workers to succeed as telecommuters. And they are also producing training materials that private companies can easily and freely adapt and use for their own telecommuting programs. Small companies, in particular, should take a look at available government documents and see about utilizing them to help make telecommuting more feasible in their own organizations.

Along these lines, and as a sample of what you can expect from your government's "Flexiplace" materials, here is an excerpted and edited version of what one government training manual has to say on the potential impact of telecommuting.

Impact On The Telecommuter: Telecommuting offers numerous benefits, including reduced stress and enhanced quality of worklife. It also raises concerns, such as the telecommuter's isolation from coworkers. Some telecommuters report some initial feelings of loss of professional identity as well as self-esteem (ironically, because they missed the spontaneous

Telecommuting *continued...*

checking up on them, and experienced a reduced level of performance feedback by their supervisors). Finally, some telecommuters perceive (accurately or inaccurately) that their telecommuting will lead to reduced visibility with their managers and, consequently, reduced opportunity for promotions and/or desirable job assignments.

There are likely to be changes in the frequency, spontaneity, mode (telephone or email as opposed to conversations in person), and length of typical work-related communications for beginning telecommuters. Because of these changes, the effectiveness of communications becomes more important. Telecommuters may find that they have fewer but more productive meetings. This makes meetings more valuable and telecommuters are likely, therefore, to improve their preparation for and participation in meetings.

To resolve the "out of sight, out of mind" concerns and to achieve the quality of communications necessary for successful telecommuting, open dialogue about these issues and joint planning between telecommuter and manager must take place. Also, telecommuting schedules should be individually tailored to provide a satisfying balance of time spent at the telecenter and the main office. Establishing core hours in the main office allows the telecommuter to participate in meetings and to have access to main office facilities and resources (including staff support and people resources). Generally, the telecommuting arrangement should address the telecommuter's needs for being informed about projects, advancement opportunities, and events that may occur in the main office on telecommuting days.

Telecommuting is a flexibility program. The telecommuter should remain flexible about the program, especially during the initial adjustment period. This will enable the telecommuter to find the optimal arrangement for his/her personality and job requirements. This will also enable the telecommuter to be responsive to unexpected contingencies which may require a change of schedule.

Energized by their increased productivity, some telecommuters fall into the trap of workaholism, sometimes to prove to their managers or coworkers that they are working hard on telecommuting days. Some telecommuters report feeling a sense of guilt about not being in the main office. The quality of work and family life benefits of telecommuting may be negated by the effects of workaholism. Being aware of this possibility, reminding themselves of the family benefits of telecommuting, and ensuring regular breaks helps telecommuters avoid the tendency to work inappropriately long hours.

Impact on Coworkers: Not only are the telemanager and telecommuter affected by a telecommuting arrangement, but coworkers are as well. Coworkers may have work assignments which involve the telecommuter or which result in workload changes due to the telecommuter's relocation. Some coworkers may feel resentment at not

BAR CODE IS OUR SPECIALTY

INPUT AUTOMATION, INC.

The single source for all your bar code system needs: hardware, software, consulting and system design. Our philosophy is based on two principles: high-quality industrial products, and the best technical support available.

DESIGN AND CONSULTING

To create your optimal solution, an Input Automation consultant will design a complete system, and then recommend equipment that fills your exact needs.

We will not be satisfied until our bar code system meets your demanding standards.

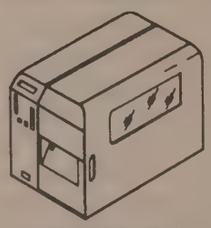
Call today for free info.& product information

(Dealer inquiries welcome)

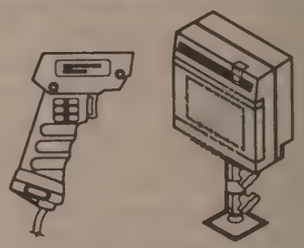
Call for an appointment to see our Showroom

Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849
Tel: (714) 374-4511

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

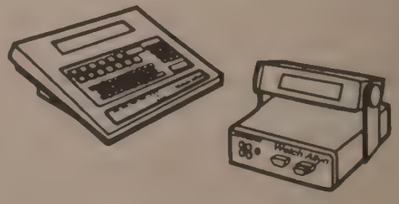


Bar Code Label Printers, Software, and Supplies



Laser Scanners. Omnidirectional, hand-held/hands-free, fixed mount.

Portable Data Collection Terminals



Welch Allyn bar code readers/scanners. Over 15 years leadership in bar code manufacturing.

INPUT automation, inc.
Authorized Value-Added Distributor

Visa & M/C Accepted

© 1992 Copyright Input Automation, Inc. All rights reserved. All product names mentioned are trademarks of their respective manufacturers. Input Automation, Inc. recognizes these trademarks

Telecommuting *continued...*

having been selected as telecommuters and/or harbor misperceptions about telecommuting. For example, some coworkers may think that the telecommuter doesn't work on telecommuting days, that the telecommuting day is, in effect, a day off work.

Preventing or overcoming coworker concerns, misperceptions, and/or resentment is an important challenge for both the telecommuter and the telemanager. To the extent possible, both need to include coworkers in their telecommuting planning process, provide for open communication between all parties, and keep coworkers informed of the telecommuter's schedule and of any changes that occur in the telecommuting arrangements. The telecommuting arrangement should provide for a convenient means of communication between telecommuters and coworkers. Telecommuters and their managers should be careful not to burden other employees with additional responsibilities such as faxing, copying, or attending meetings.

As part of their adjustment, it is common for coworkers to compensate for telecommuters' absence by increasing the frequency of communications. This increase usually levels off after new routines and patterns are established. Eventually, coworkers are likely to save their messages and contact the telecommuter on a single occasion instead of several times throughout the same day or week. When a coworker is nearby, a problem or question may seem urgent enough to cross the aisle or hall to discuss immediately with the telecommuter. When that same telecommuter is out of the central office and must be reached by telephone, some people realize that the information isn't needed immediately. The physical separation created by telecommuting can be enough to encourage employees to reconsider the need to interrupt another person and recognize when issues that initially seem urgent can be resolved at a more convenient time.

This saving of messages has been cited as a benefit of telecommuting. In addition to decreasing interruptions, many people find the self-imposed delay enables them to either organize their thoughts more thoroughly before sharing them with others, or solve the problem themselves.

Impact on the Organization: There are several significant ways in which telecommuting benefits organizations. These include improved employee morale, improved ability to recruit and retain employees, more effective management, improved job performance, and reduced operating costs (in areas such as facility, facility maintenance, and health care/sick leave costs). To some extent, however, the impact of telecommuting on the organization depends on the culture of the organization, and especially on its receptivity to change. Some organizations will achieve these benefits with minimal effort and resources. Others may never fully achieve them.

For organizations with change-resistant cultures, implementing telecom-

CNE & ECNE Training Products

*Powerful Windows based training products at affordable prices! Practice commands & utilities on simulations built in to our Computer Based Training programs. **Multi-user licences** for LANs are also available.*

CBT's (incl. books)

DOS & Micro. Concepts	$ 99.00
Administration v3.1x	$ 175.00
Adv. Administration v3.1x	$ 199.00
System Manager v2.2	$ 175.00
TCP/IP Transport	$ 199.00
Service & Support (# 801)	$ 249.00
3.1x Install & Config. (# 802)	$ 199.00

Books

DOS & Micro. Concepts	$ 29.00
Administration v3.1x	$ 59.00
Adv. Administration v3.1x	$ 59.00
System Manager v2.2	$ 59.00
TCP/IP Transport	$ 59.00
Service & Support (# 801)	$ 79.00
3.1x Install & Config. (# 802)	$ 79.00
Networking Technologies	$ 89.00
Net. v3.11 to v4.x Update	$ 79.00

Proficiency Tests

DOS & Micro. Concepts	$ 19.95
Administration v3.1x	$ 19.95
Adv. Administration v3.1x	$ 19.95
System Manager v2.2	$ 19.95
TCP/IP Transport	$ 19.95
Service & Support (# 801)	$ 29.95
3.1x Install & Config.(# 802)	$ 19.95
Net. v3.11 to v4.x Update	$ 19.95
System Admin. v4.0	$ 19.95
Ad. Administration v4.0	$ 19.95
Networking Technologies	$ 19.95
4.0 Installation workshop	$ 19.95
Printing with NetWare	$ 19.95
NetWare Global MHS	$ 19.95
Unix OS Fundamentals	$ 19.95
Fundamentals of Internetworking & Mgmt. design	$ 19.95

!! Final month for these CBT special prices !! !!

Ask about our Instructor-led Hands-on Training Sessions.

HiTek Solutions, Inc. (Authorized Distributor)
2361 Campus Dr., Suite 107, Irvine, CA 92715
Tel : 714-474-8270 Fax : 714-474-8272
OR call LanTec at Tel: (613) 736 - 5326 Fax: (613) 736 - 9614
All prices are subject to change without notice.

LANTEC

#1 IN PRICE, QUALITY, RELIABILITY & SERVICE

MONTHLY SPECIALS!

486DX2-66 Multimedia

- Double Speed (2x) CD ROM
- Sound Blaster 16 MCD by Creative Lab
- 14 CD Titles, 2 Speakers
- 486DX2-66MHz VESA Local Bus
- "Green" Motherboard
- Pentium Overdrive (P24) Ready, w/ZIF Socket
- 256K Cache
- 4MB RAM Exp. to 64 MB
- 540 MB Fast IDE HD, 1.44MB Floppy Drive
- VESA LB Dual FD/HD Controller
- VESA LB Accelerated SVGA w/1MB Exp. to 2MB
- 14" 1024 NI .28 SVGA Monitor
- 101 Enhanced Keyboard, Mouse
- Mini Tower Case

Special **$1179**

486DX-33.....$1155 • 485DX4-100.....$1395

486DX2-66 System

- 486DX2-66 MHz VESA Local Bus
- "Green" Motherboard
- Pentium Overdrive (P24) Ready, w/ZIF Socket
- 256K Cache
- 4MB RAM Exp. to 64 MB
- 420 MB Fast IDE HD, 1.44 MB Floppy Drive
- VESA LB Dual FD/HD Controller
- VESA LB Accelerated SVGA w/1MB Exp. to 2MB
- 14" 1024 NI .28 SVGA Monitor
- 101 Enhanced Keyboard, Mouse
- Mini Tower Case

Special **$935**

NOTEBOOKS

486DX2 • 486DX4

Call for Low Price!

Hours: MON - FRI 10am - 7pm • SAT 10am - 6pm • SUN By Appointment

MAGIC SONIC COMPUTERS

Magic Sonic Computers

8977 Foothill Blvd. #G
Rancho Cucamonga, CA
909·483·5351
Fax: 909·944·3190

WARRANTY Two years on parts; two years on labor. Hard drives and monitors warrantied by manufacturers

MIPS' COMPUTER
Your ultimate choice!

MONTHLY SPECIAL!
PCI Super DEAL

- Intel CPU, ZIF Socket, Green Motherboard
- 256K Cache, w/PCI, VLB & ISA Slots
- 8MB RAM, 70ns (exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 425MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- PCI IDE Controller
- PCI, Diamond or ATI w/1MB, Max. 16M Color, 1280 x 1024 Res
- 14" Non-Interlaced SVGA .28dp Green
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS
- FREE Microsoft Compatible Mouse

PCI 486DX2-66....$1199
PCI Pentium 66....$1595
PCI Pentium-90 ...$1695

INTEL 486DX
VESA Local Bus

- Intel CPU
- 3VL Bus, ZIF, Green Motherboard
- Built-in 80487 Math Co-Processor
- CPU Cooling Fan w/Heatsink
- 256K Cache, AMI BIOS
- 4MB RAM, 70ns (Exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 425 MB IDE Hard Drive
- 2 Serial, 1 Parallel, 1 Game
- 32 Bit Local Bus IDE Controller
- 32 Bit Local Bus Video w/1MB (Exp. to 2MB) (Resolution up to 1280 x 1024)
- 14" Non-Interlaced SVGA .28dp LR
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS

VL486DX-33 .....$895
VL486DX2-66 .....$955

Intel PENTIUM
PCI SuperFAST

- Intel CPU, Zif Socket, Green Motherboard
- 256K Cache, w/PCI, VLB & ISA Slots
- Built-in Math Co-Processor
- 8MB RAM, 70ns (Exp. to 128MB)
- 1.44MB 3.5" TEAC Floppy
- 540MB SCSI-2 Fast Hard Drive
- 2 Serial, 1 Parallel, 1 Game Port
- PCI SCSI-2 Controller
- PCI, Diamond or ATI w/1MB, Max. 16M Color, 1280 x 1024 Res
- 15" Non-Interlaced SVGA .28dp Digital
- 101 Enhanced Keyboard
- Digital Medium Tower w/230PS

PCI 486DX2-66 .....$1399
PCI Pentium-66 .....$1795
PCI Pentium-90 .....$1895

ULTIMATE PCI

- Intel CPU, ZIF Socket, Green Board
- 256K Cache w/PCI, VLB & ISA Slots
- Built-in Math Co-Processor
- 16MB RAM, 70ns (Exp. to 128MB)
- 1.2MB & 1.44MB TEAC Floppy
- 1GB SCSI - 2 Fast Hard Drive
- 2 Serial, 1 Parallel, 1 Game Port
- PCI, Adaptec 2940 SCSI Controller
- PCI, D / Stealth - 64 Bit 2MB VRAM, Max. 16M Color, 1280x1024 Res.
- 17" (MAG) MX17FG .26 SVGA
- Focus 2001 Keyboard
- Digital Full Tower w/250PS
- FREE** Microsoft Serial Mouse

PCI 486DX2-66 .....$2745
PCI Pentium-66 .....$3145
PCI Pentium-90 .....$3245

Prices subject to change without notice. Not responsible for typographical errors.

VISA MasterCard CrossCheck UPS Novell Certified NetWare Engineer

UPGRADES

8MB (Total) from 4MB	$140
16MB (Total) from 4MB	$345
540MB from 425MB	$40
15" NI .28dp from 14"	$95
Fax/Modem (14400)	$55
250MB Tape Backup Drive	$155

MULTIMEDIA UPGRADE KIT

2X Panasonic Package (MCD Sound Card, 12 CD Titles, Speakers)	$245
3X NEC 510 SCSI-2	$475
4X Toshiba 3501B SCSI-2	$595

(909) 468-9622

WARRANTY...One Year parts and labor.

TERMS and CONDITIONS

- 15 Day Money Back Guarantee with 15% Restocking Fee.
- 72 Hours Burn-in Tested.
- All Brand New Parts.
- Prices & Specifications Subject to Change Without Notice.
- Prices shown are Based on 3% Cash Discount.
- Shipping & Handling Fee are Not Refundable.
- Dealer and Consultant Inquiries Welcome.
- All Software Sales are Final.
- Not Responsible for Typographical Errors.
- We Accept Government & University P.O.'s.

COMPONENTS

Memory:

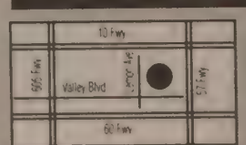
1MB SIMM, 70ns	$40
4MB SIMM, 70ns	$145

Vesa Local Bus Motherboard:
256K Cache, 3VLB, ZIF, Green, AMI BIOS

• board only w/o CPU	$90
• with Intel 486DX-33	$215
• with Intel 486DX2-66	$275
PCI, 486DX2-66 Intel CPU	$335
PCI, Pentium 66 Intel CPU	$715
PCI, Pentium 90 Intel CPU	$800
PCI/VLB IDE + IO	$25/$15
PCI/VLB Windows Acc. w/1MB	$95/$55

Hard & Floppy Drives:

TEAC 1.2MB 5.25"/1.44MB 3.5"	$45/$35
250MB/425MB IDE Hard Drive	$155/$185
540MB/1GB IDE Hard Drive	$225/$435
270MB/540MB SCSI Hard Drive	$195/$255
1GB/2GB SCSI Hard Drive	$535/$995



MIPSystem, Inc.
QUALITY COMPUTER PRODUCTS & SUPPORT
304 S. Lemon Ave.
Walnut, CA 91789
Tel: (909) 468-9622 Fax: (909) 468-9313
Hours: Monday-Friday 9:00-5:30

Telecommuting *continued...*

muting can be difficult. Within such organizations, proponents of telecommuting should be prepared to devote the time, effort, and understanding needed while the organization adjusts to the new work arrangement. As with individuals affected by telecommuting, organizations may need time to adjust to these changes.

Impact on Customers: In addition to organizational, job, and staff considerations, telemanagers and telecommuters need to consider the impact of telecommuting on their customers. The needs and requirements of both internal and external customers should be addressed in telecommuting plans. For example, customers may face long-distance telephone charges or may require new procedures when communicating with the telecommuter. Adjusting the telecommuting arrangement so that it has a zero or positive impact on customer service is an important objective for telecommuting planning. Some offices focus on establishing procedures that seek to make the customer totally unaware of the telecommuter's alternate work site location. Other offices fully inform customers, alerting them to the telecommuter's schedule and location. If done effectively, either approach can provide adequate customer access to the telecommuter.

Impact on Personal Life/Families: A majority of telecommuters report that telecommuting has a positive impact on the quality of their personal life. The benefits of decreased stress, more personal time, and greater job satisfaction for the employee carry over to the home.

Telecommuting may also make it easier to manage and schedule child and elder care arrangements. Experienced telecommuters warn, however, that telecommuting cannot be a substitute for dependent care, although it may make mornings and evenings less harried.

Since the telecommuter is closer to home, family members may see this as an opportunity for the employee to assist with errands or other personal responsibilities. The telecommuter should be careful not to overschedule.

Finally, for home-based telecommuters, it is important that a comfortable boundary, both physical and social, be maintained between job activity and personal/family activity. To the extent possible, the telecommuter should establish a specific workspace that should not intrude into the rest of the household, and vice versa. Also, the telecommuter should prevent work activity from intruding into personal time and activities, and vice versa.

This material came from *Implementing Telecommuting (Flexiplace), a Manual for the Interagency Telecommuting Program*, prepared by Wendell H. Joice, Ph.D., Cooperative Administrative Support Program, Office of Workplace Initiatives (CW), US General Services Administration, 18th and F Streets N.W., Room 7007, Washington, D.C. 20405, phone (202)273-4660, fax (202)273-4670. ■

Copyright © 1995 by Robert Moskowitz. All rights reserved.

continued from page 54

nection you want between your LAN and your provider. If you're not planning on setting up a high-volume Internet site, your provider will probably suggest either a 56k to 128k bits per second (bps) "frame relay" or "ISDN" connection to their service. If you expect your needs will grow over time, you should probably consider getting a "fractional T1" frame relay connection, because it allows you to change the speed of your data connection, from 128kbps up to 1.5Mbps without having to replace your data communications equipment or router. (A router is a device that "routes" traffic sent from your network to the Internet to your Internet access provider.)

There are many more LAN environments looking to connect to the Net than there are LAN administrators who know how to do it.

Once you've settled on what type of telephone connection you'll use, it's time to settle on a domain name. A domain name is logical name for your organization, or "domain," that people can use to address email messages and to locate Internet resources on your network, like "*microsoft.com*," and "*oakland.edu*." Domain names are registered with the Internet Network Information Center (NIC), and have two parts. The first part is a name, like "*microsoft*" or "*oakland*," the second part identifies the type of organization, like "*.com*" for commercial Internet sites, and "*.edu*" for educational institutions. If your organization is a for-profit business, you'll be assigned the "*.com*" extension. You also need to remember that only one organization can have any particular domain name, so if your company name is "Irving, Bangor, and Ming," you'll have to pick a domain name other than "*ibm.com*." It's already taken.

That about wraps it up for what to look for when you're hunting for an Internet access provider. Next time I'll talk about what you need at your end of the connection, and help you figure out what an Internet "server" does. ■

Copyright © 1995 by Peter Harrison. All rights reserved.

continued from page 87

resulting from the fact that the .GIF specification designed by CompuServe contained proprietary LZW compression technology. However, CompuServe remains committed to the continued free interchange of online graphics. For this reason, we will be offering our resources to develop a follow-on specification to .GIF that will offer significant enhancements and be free and open.

CompuServe is announcing that we will coordinate the development of .GIF24, a successor to .GIF capable of 24-bit lossless compression. CompuServe is committed to keeping .GIF24 as an open specification, available without cost. This effort will also avoid a proliferation of standards. The new specification will be developed in cooperation with the graphics community and will include a review of relevant technology and intellectual property issues.

In keeping with these goals, we are soliciting input from key GIF users such as: commercial graphics vendors, the CompuServe GO GRAPHICS Forum community, Internet communities including the World Wide Web, and bulletin board developers and users. As the first step in this process, we have been interacting privately with many people who have offered constructive input on .GIF via CompuServe and the Internet.

As the next step, we have established an email address for public input regarding GIF24. Suggestions can go to: .GIF24@csi.compuserve.com *when sending from the Internet, or* CSI:GIF24 *when sending from CompuServe. We invite suggestions of design goals for .GIF24 as well as technologies to be considered for use in the new specification. In addition, we solicit nominations of community representatives who will be invited to participate in developing .GIF24 as an open standard.*

CompuServe wishes to acknowledge the contributions of the online community to the ongoing .GIF discussion, and we look forward to further input. Based on the response to this announcement, we will shortly provide a synopsis of initial design goals for .GIF24, an initial list of nominees to participate in the development, and further details on the development process.

Thank you for your time and input.

Sincerely,
Tim Oren
CompuServe vice president,
Future Technology

•Copyright © 1995 by Kathleen Creighton. All rights reserved.

MicroTimes Quotation Hotline

Bringing Buyers and Sellers Together

Beginning with the April 1, 1995 issue, MicroTimes will offer our advertisers a new way to reach California's active computer buying audience. Using an e-mail provider and a specially designed quotation request form, advertisers will be able to provide potential customers with specific pricing quotations.

Take advantage of this business-building opportunity!

Call your MicroTimes sales representative today:

(213) 851-8600
(714) 939-2809

The Best Products. The Best Solutions. The Best Prices.

Consumer Technology WORLD

The 1995 Los Angeles Consumer Technology World Event

February 11-12, 1995

Fairplex Exposition Center
Pomona, California

All-Day Unlimited Seminar & Exhibit Pass—$15.00
Includes Keynote speakers & all seminars.
Choose from over 40 different sessions with speakers from IBM, Microsoft, and more!
Exhibit Only Pass—$7.00

Sponsored by

TIMES LINK

Call 1-800-800-5600 for more information

Conference Agenda

Over 450 Computer Exhibits!
Open 10:00AM-5:00PM Both Days

Saturday February 11, 1995

11:30am-12:30pm

Keynote Address - Carousel Ballroom
Victor A. Perry III *Vice President New Business Development, Los Angeles Times*

1:00-2:00pm

OS/2 Warp Version 3 Overview - Carousel Ballroom
Mark Selleck *Personal Systems Manager, IBM Corporation, Pacific Northwest*

Advanced Introduction to CorelDRAW!4 - Tower
Mark Brownstein *Former LA Bureau Chief, InfoWorld, Author, Editor*

Information Highway or Propaganda Toll Road? - Plaza
Tom Nadeau *Consultant, IMA Computer*

Buying Your First Computer - Pavilion 1 & 2
Betty Sheets *Consultant, Starlight Education*

Career Training in the Computer Industry - Courtyard
New Horizons Computer Learning Center

2:30-3:30pm

Microsoft Office Overview - Word, Excel, PowerPoint, Access - Carousel Salon A & B
Microsoft Representative *Microsoft Corporation*

Beginning Internet - Carousel Salon C & D
Dave Overoye *Producer, Video Guide to the Internet*

Genealogy Online - Tower
Lee Everton *Publisher, Everton's Genealogical Helper*

Computer Consulting For A Profit - Courtyard
William Mooney *Director, William Mooney Associates*

How to Turn Ho-Hum Documents into Ooh-Aah Documents - Plaza
Ann McIndoo *Consultant, Computer Training Services*

Computer Audio - Pavilion 1 & 2
Tony Rockliff *President & Producer, MultiMedia Magic*

4:00-5:00pm

Claris Organizer Overview - Carousel Salon B
Claris Representative *Claris Corporation*

Intermediate Internet - Carousel Salon C & D
Dave Overoye *Producer, Video Guide to the Internet*

Mobile Technology - Carousel Salon A
Jagdeep Singh *President, CEO & Chairman, AirSoft, Inc.*

Interactive Multimedia Advertising - Pavilion 1 & 2
Tony Rockliff *President & Producer, MultiMedia Magic*
Steve Robinson *Client Services Manager/CD, Ziff Davis Publishing Co., PC Magazine*

How To Learn To Use Your Computer - Courtyard
Thomas Lenzo *Training & Development Consultant*

Sunday February 12, 1995

11:00am-12:00pm

OS/2 Warp Version 3 Overview - Carousel Ballroom
Mark Selleck *Personal Systems Manager, IBM Corporation, Pacific Northwest*

How to Market Your Computer Consulting Business - Courtyard
William Mooney *Director, William Mooney Associates*

Save Big Money & Avoid Obsolescence Too - Plaza
Tom Nadeau *Consultant, IMA Computer*

Introduction To Software - Pavilion 1 & 2
Betty Sheets *Consultant, Starlight Education*

Computer Accounting Systems for Small Business - Tower
New Horizons Computer Learning Center

12:30-1:30pm

Microsoft Office Overview - Word, Excel, PowerPoint, Access - Carousel Salon A & B
Microsoft Representative *Microsoft Corporation*

Genealogy Online - Tower
Lee Everton *Publisher, Everton's Genealogical Helper*

Telecommuting Strategy - Plaza
Russ Chung *Russ Chung Consulting*

How Using a PC Can Improve Your Health - Courtyard
Andy Lindgren *Pulse Metric, Inc.*

How To Get Noticed in the Interactive Gaming Industry - Carousel Salon D
Doug Johnson *Chairman & Founder, Quadra Interactive, Inc.*

2:00-3:00pm

Beginning Internet - Carousel Salon C & D
Dave Overoye *Producer, Video Guide to the Internet*

Introduction to 3D Graphics & Animation - Pavilion 1 & 2
Kevin Bromber *Visual Software*

Spreadsheets: They Mean Business - Plaza
New Horizons Computer Learning Center

ClarisWorks Overview - Carousel Salon B
Claris Representative *Claris Corporation*

3:30-4:30pm

Intermediate Internet - Carousel Salon C & D
Dave Overoye *Producer, Video Guide to the Internet*

Interactive Multimedia Advertising - Pavilion 1 & 2
Tony Rockliff *President & Producer, MultiMedia Magic*
Steve Robinson *Client Services Manager/CD, Ziff Davis Publishing Co., PC Magazine*

Anticipated additions to the Conference Agenda include: Intel, Apple, Broderbund, Creative Labs, Inc., ImagiNation!, Prodigy, Compton's New Media, Business Software Alliance, and more! For updated information on seminars call National Productions at 800-800-5600!

Future Computer Shows

January 14 & 15	Reseda, Sherman Entertainment Center	April 1 & 2	Boston, World Trade Center
21 & 22	Pomona, Fairplex Exposition Center	1	Reseda, Sherman Entertainment Center
28	Santa Barbara, Earl Warren Showgrounds	2	Buena Park, Sequoia Conference Center
February 4	Reseda, Sherman Entertainment Center	8 & 9	Pomona, Fairplex Exposition Center
5	Buena Park, Sequoia Conference Center	May 6 & 7	Santa Barbara, Earl Warren Showgrounds
11 & 12	Pomona, Fairplex Exposition Center	13 & 14	Pomona, Fairplex Exposition Center
March 4 & 5	Pomona, Fairplex Exposition Center	June 3 & 4	Pomona, Fairplex Exposition Center
11 & 12	Santa Barbara, Earl Warren Showgrounds	10	Reseda, Sherman Entertainment Center
25 & 26	Pomona, Fairplex Exposition Center	11	Buena Park, Sequoia Conference Center
		24 & 25	Pomona, Fairplex Exposition Center

Resources

Calendar Of Events

Conferences, Shows, Special Events

February

February 4 California Computer Mart. Glendale Civic Auditorium. Computer Super Shows. Call: (714)459-6105.

February 4 Computer Marketplace Show. Sherman Entertainment Center, Reseda. National Productions. Call: 1-800-800-5600.

February 4–5 Computer Show And Sale Expo. 14650 Parthenia Dr., Panorama City. Bonanza Show Productions. Call: Paul, (415)595-1053.

February 5 Computer Marketplace Show. Sequoia Conference Center, Buena Park. National Productions. Call: 1-800-800-5600.

February 5 Computer Show And Sale. Antelope Valley Fairgrounds, Lancaster. MarketPro Shows. Call: 1-800-708-7555.

February 11 Computer Show And Sale. Fresno Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

February 11–12 Consumer Technology World. Pomona. National Productions. Call: 1-800-800-5600.

February 12 Computer Show And Sale. Scottish Rite Center, San Diego. MarketPro Shows. Call: 1-800-708-7555.

February 15–17 Southwest Regional Government Technology Conference. Austin, TX. GTC. Call: Paul Fairbrother, (512)794-9938.

February 18 Computer Show And Sale. Kern County Fairgrounds, Bakersfield. MarketPro Shows. Call: 1-800-708-7555.

February 18 Computer Show And Sale Expo. 14650 Parthenia Dr., Panorama City. Bonanza Show Productions. Call: Paul, (415)595-1053.

February 18–19 California Computer Mart. Long Beach Convention Center. Computer Super Shows. Call: (714)459-6105.

February 18–19 Computer Show And Sale. Ventura Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

February 20–23 Digital Hollywood: The Media Marketplace Conference And Expo. Beverly Hills. American Expositions. Call: (212)226-4141.

February 27–March 1 Consumer Online Services Conference. New York City. Jupiter Communications. Call: 1-800-488-4345.

February 28 Computer Show And Sale Expo. Valley Indoor Swap Meet Building, 1600 E. Holt, Pomona. Bonanza Show Productions. Call: Paul, (415)595-1053.

FEBRUARY 28

COMPUTER SHOW AND SALE EXPO

VALLEY INDOOR SWAP MEET BUILDING, POMONA

Bonanza Show Productions presents the Computer Show and Sale Expo in Pomona on February 28. There will be millions of dollars of state-of-the-art computer merchandise—including CD-ROMs, software, hardware, memory chips, peripherals, and more—under one roof at the lowest prices in the country. The Valley Indoor Swap Meet Building is located at 1600 E. Holt, at the intersection with Indian Hill Blvd., and parking is free. Admission is $5; children twelve and under are free. For more info call Paul at (415)595-1053.

MARCH 5–9

COMPCON '95: INFORMATION SUPERHIGHWAY TECHNOLOGIES

STANFORD COURT HOTEL, SAN FRANCISCO

COMPCON '95 is the premier professional conference on information superhighway technologies and applications. It is sponsored by the IEEE Computer Society. There are no exhibits: this is a no-nonsense technical conference for computer science and engineering professionals who are interested in sharing and learning more about the rapidly growing information superhighway business. Besides three days of ninety technical sessions, there are nine tutorials in relevant subjects. Some of the keynote speakers at COMPCON '95 will be Dave Farber, professor at the University of Pennsylvania; Jim Clark, CEO of Netscape; Steve Schramm, VP of engineering at General Magic; and Andy Lippman, professor at MIT. For more information email: egrimes@aol.com or fax: (408)973-1325.

MARCH 14–18

TECHNOLOGY AND PERSONS WITH DISABILITIES CONFERENCE

LOS ANGELES AIRPORT MARRIOTT AND AIRPORT HILTON

The Tenth Annual International Technology and Persons With Disabilities Conference will cover all aspects of disabilities and feature an internationally recognized faculty. It includes twenty-two practical how-to pre-conference sessions; a keynote address by Deborah Kaplan, a task force member of the National Information Infrastructure; a special mini-conference on the Electronic Superhighway; a limited number of scholarships for parents of disabled children and persons with disabilities through grants from Pacific Telesis Foundation and CSUN; more than 130 exhibit stations within 23,000 square feet of exhibit space; more than 210 one-hour and half-hour general session presentations; new product announcements; and special conference sessions on "State Tech Act Grant" issues. For more info call (818)885-2578 (voice, TDD, message), fax (818)885-4929, or email ltm@csun.edu .

March

March 1 Live Internet Interview With Sven Birkerts, Author Of *The Gutenberg Elegies: The Fate Of Reading In An Electronic Age.* Internet Relay Chat. Internet Roundtable Society. Email: *IRinfo@fununiv.com*; WWW: *http://www.IRsociety.com*; Gopher: *gopher.IRsociety.com* .

March 5 Computer Show And Sale. Scottish Rite Center, San Diego. MarketPro Shows. Call: 1-800-708-7555.

March 7–9 Documation '95 Conference And Expo. Long Beach. Graphic Communications Association. Call: 1-800-865-6493.

March 11–12 Computer Show And Sale. Ventura Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

March 12 Computer Show And Sale. Antelope Valley Fairgrounds, Lancaster. MarketPro Shows. Call: 1-800-708-7555.

COMPUTER SUPER SHOWS

SATURDAY, FEB. 4 GLENDALE CIVIC AUDITORIUM
SAT & SUN, FEB. 18-19 LONG BEACH CONVENTION CNTR
SAT & SUN, FEB. 25-26 CSUN (Cal State Northridge) Devonshire Downs
SATURDAY, MAR. 11 GLENDALE CIVIC AUDITORIUM

Wholesale To The Public
Hardware - Software - Systems & More
FREE Seminars & Door Prizes

Show Hours 10am - 5pm
$5. Admission Under 12 Free
For Info: (714) 459-6105

SEMINAR TOPICS:
- BECOMING NOVELL CERTIFIED
- INTRO TO WORDPERFECT 6.0
- MICROSOFT WORD 6.0
- THE WORLD OF INTERNET
- QUICKEN 4.0 (ACCOUNTING)
- MICROSOFT EXCEL

DOOR PRIZES:
- TEAC 4X SPEED CD-ROMS
- 14,400BD FAX/MODEMS
- NEW MICROSOFT KEYBOARDS
- 120W P.C. STEREO SPEAKERS
- MICROSOFT OFFICE PROFESSIONAL
- SOUND BLASTER 16 CARDS

Pentium-66 PCI
- INTEL 66 MHz CPU w/ Fan
- 8 MB RAM / 256K Cache
- Maxtor 540 MB IDE Hard Disk
- 1.44 MB Floppy
- Enhanced on Board PCI IDE Controller
- DIAMOND Stealth 64 PCI
- 14" SVGA Monitor .28 dp NI
- On Board Enhanced 2 S & 1P
- MID Tower w/230 W UL P/S
- 101-key Enhanced Keyboard
- Microsoft compatible Mouse
- Teak Super Quad
- SoundBlaster 16 MCD
- Amplifier Speakers
- 200 PLUS Titles

$1,899.00*

486DX2-66 VLB
- 3 VLB-INTEL CPU
- 4 MB RAM / 256K Cache
- 420 MB IDE Hard Disk
- 1.44 MB Floppy
- VESA IDE w/ 2 S 1 P
- 32 BIT VESA 1MB SVGA
- 14" SVGA Monitor .28 dp NI
- MID Tower w/230 W UL P/S
- 101-key Enhanced Keyboard
- Microsoft compatible Mouse
- Sound Blaster 16 MCD
- Panasonic 562B 2X CD ROM
- Amplifier Speakers
- 200 PLUS Titles

$1,199.00*

SILICON AVENUE AND **Computer Books 4 Less**

980 E. Orangethorpe Ave., #C
Anaheim, CA 92801
(714) 680-0828

1212 N. San Fernando Blvd., Suite K
Burbank, CA 91504
(818) 567-0016

All Computer Books 20%–80% OFF!

Price Reflects a 3% Discount for CASH

Multimedia 4XS TOSHIBA 3501 Quad Speed
SB16 SCSI II
200 PLUS Titles & Speakers
$399.99*

Multimedia 4XT TEAC Super Quad
SB16 MCD
200 PLUS Titles & Speakers
$299.99*

Multimedia 2XS NEC 210 Dual Speed
SB16 SCSI II
200 PLUS Titles & Speakers
$279.99*

Multimedia 2XP PANASONIC 562 Dual Speed
SB16 MCD
200 PLUS Titles & Speakers
$225.99*

CLEAN UP YOUR ACT

MICROTIMES IS RECYCLABLE

NETWORK CLASSES

Want a Career Boost? Be a Network Pro !

H.J. Technology
141 E. Duarte Rd.
Arcadia, CA 91006
818-447-9959
Fax: 818-447-9882

NOVELL CERTIFICATION CLASSES
CNE/CNA Certifications
* Small Class Environment
* Experienced Netware Instructors
* Day, Evening, and Weekend Classes
* Novell's Books/Material & NUI Videos
* Hand-on Lab, One Computer/Student
* Money Back Satisfaction Guaranty
*Payment Plan Available

Why Pay More When You Can Get the Same Quality Training Here?!

March 12 Computer Show And Sale. Fresno Fairgrounds. MarketPro Shows. Call: 1-800-708-7555.

March 14–16 New Media Expo. Los Angeles. The Interface Group. Call: (617)449-6600.

March 14–18 Technology And Persons With Disabilities Conference. Los Angeles. Center on Disabilities. Call: (818)885-2578, email: *ltm@csun.edu* .

March 19–23 Supercom With ICA Expo. Anaheim. Smith & Shows. Call: 1-800-422-4636.

March 26 ACP Computer Swap Meet. 1310 E. Edinger, Santa Ana. ACP. Call: (714)558-8813.

March 27–31 NetWorld + InterOp Conference. Las Vegas. Smith & Shows. Call: (415)578-6900.

April

April 1 L.A.S.F.S. Virtual Reality Showcase. North Hollywood. *StarQuest* Magazine. Call: (818)764-8494.

April 24–26 DISA's EC/EDI Conference And Exhibit. Seattle. Data Interchange Standards Association. Call: Patricia M. Curran; (703)548-7005.

May

May 7–11 1995 Conference On Human Factors In Computing Systems. Denver, CO. ACM. Call: (410)263-5382.

May 17–19 Government Technology Conference West. Sacramento. Smith & Shows. Call: (916)363-5000.

May 19–21 Small Office And Home Office Expo And Conference. Anaheim Convention Center. Advanstar Expositions. Call: 1-800-854-3112.

May 21 ACP Computer Swap Meet. 1310 E. Edinger, Santa Ana. ACP. Call: (714)558-8813.

May 24–26 International Trade Exposition US-China Tech Show. San Jose. CATE Development Inc. Call: (415)903-2270.

Classes, Seminars, Workshops

February

February 6–7 Basic Mac Skills III Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 6–7 Windows Multimedia Production With Microsoft I Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 6–8 Masking With Photoshop Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 10–12 Basic Desktop Video With Premiere I Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 13 Advanced System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

February 13–14 Understanding Document Imaging Seminar. Costa Mesa. Data-Tech Institute. Call: (201)478-5400.

February 13–15 Basic After Effects From Adobe Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 14 Software Licensing Agreements Seminar. San Diego. Center for Advanced Professional Development. Call: (714)261-0240.

February 17–19 Basic Authoring Tools I Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 20 Intro To IRIX Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

February 21–22 Multimedia With Passport Producer Pro Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 21–23 Radius Digital Video Training Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 23–24 Understanding Data Communications Seminar. Irvine. Data-Tech Institute. Call: (201)478-5400.

February 24–26 Basic Imaging With Photoshop II Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 25 "Interactivate" Your Career: A Practical Guide To Opportunities In Multimedia Seminar. Los Angeles. UCLA Extension. Call: (310)825-9064.

February 27 System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

February 27–28 Windows On NetWare Seminar. Irvine. Data-Tech Institute. Call: (201)478-5400.

February 27–March 1 Jumpstart Imaging I Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

February 27–March 3 Certified NetWare Engineer Fullpath Test Review Course. San Diego. Center for Advanced Professional Development. Call: (714)261-0240.

March

March 6 Windows 95 Systems II Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 6–10 UNIX Kernel Internals Class. Los Angeles. UCLA Extension. Call: (310)825-1047.

March 7–8 Basic Mac Skills IV Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 10–12 Basic Electric Image Tools Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 10–13 Multimedia Intensive Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 13 Open GL Programming 1 Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

March 13–15 Basic Desktop Video With Premiere II Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 15 Certified Software Manager Seminar. San Diego. Software Publishers Association. Call: Becky Howland, (202)452-1600 ext. 367.

March 18–19 Advanced Desktop Video With Premiere Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 20 Intro To IRIX Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

March 23–April 27 Mac For Broadcast Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 24–26 Technical Desktop Video And Tools Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

March 27 System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

Resources

March 27–29 Adobe Illustrator Fundamentals Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
March 27–29 Virtus Walkthrough Pro Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
March 30–31 Advanced PC Troubleshooting Seminar. Fresno. Essential Seminars. Call: 1-800-723-7025.
March 31–April 2 Basic 3D Tools Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

April

April 1 Adobe Premiere MC Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 3 Hollywood In Cyberspace: Staking Your Claim On The Online Frontier Seminar. Hollywood. Sensational Seminars. Call: Nina Steiner, (310)288-3425, email: *sensational@earthlink.net* .
April 3–5 Basic Imaging With Photoshop III Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 4 Certified Software Manager Seminar. Los Angeles. Software Publishers Association. Call: Becky Howland, (202)452-1600 ext. 367.
April 4–5 KPT Bryce Canyon Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 7–9 Jumpstart Imaging II Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 8–9 Adobe After Effects Master Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 11–12 Windows Multimedia Production With Microsoft Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 17 Advanced System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.
April 17–19 AppleScript Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 17–19 Radius Digital Video Training Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 20–21 Accessing The Internet Seminar. Irvine. Data-Tech Institute. Call: (201)478-5400.
April 21–23 3D With Presenter Pro Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 21–23 Basic Desktop Video With Premiere III Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 24 Intro To IRIX Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.
April 24–26 Basic Authoring Tools II Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 24–26 Painter 3.0 Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.
April 28–30 Macromedia Authoring Tools Class. Los Angeles. American Film Institute. Call: 1-800-999-4AFI or (213)856-7690.

May

May 1 System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.
May 29 System Administration 5.x Class. Los Angeles. Silicon Graphics. Call: 1-800-800-4SGI.

BONANZA SHOW PRODUCTIONS PRESENTS THE
COMPUTER SHOW AND SALE EXPO
PANORAMA CITY SWAP MEET BLDG.
Saturday, February 4
Saturday, February 25
Saturday, March 18
14650 Parthenia Drive, Panorama City, CA
From 170 exit Roscoe Blvd. to Van Nuys Blvd.
Right on Van Nuys Blvd. to Parthenia.
From 405 exit Roscoe Blvd. to Van Nuys Blvd.
Left on Van Nuys Blvd. to Parthenia.
NEW POMONA
POMONA VALLEY INDOOR SWAP MEET BLDG.
Sunday, February 26 (Tentative)
Sunday, March 19 (Tentative)
1600 East Holt Blvd., Pomona, CA
From the 10 Freeway Exit Indian Hill Blvd. Go South
The exhibit hall is located on the corner of Holt & Indian Hill Blvd. Please use South Entrance.
SHOW HOURS: PANORAMA 10AM - 5PM
POMONA 10 AM - 4PM
FREE PARKING!
$1.00 OFF WITH THIS AD!
REGULAR ADMISSION $5.00.
YEARLY MEMBERSHIP $25.00!
CHILDREN 12 & UNDER FREE ONE DISCOUNT PER PERSON
COPIES OK FOR INFO CALL: 1.415.595.1053 MTSC

AMERICAN COMPUTER SHOW
RED HOT Show CSU Long Beach
Up to 150 Exhibits for our Mega Shows
The Most POWERFUL Shows in Town
The latest PC systems, Notebooks, Multi-Media, Boards, Laser Printers
Fax Modems, Disk Drives, Softwares, Books, Accessories, and more
Lower Than Mail Order Prices - Below Wholesale - Up to 50% Off Retail
Feb 18-19 Sat & Sun 10 - 5PM — Cal State Northridge, 18111 Nordhoff Street, Northridge (In Student Union)
MEGA SHOW
SUPER SAVINGS SHOW
Next to the new PYRAMID
Feb 26 Sunday 10 - 5PM — Cal State Long Beach, 1250 Bellflower Blvd., Long Beach
Mar 4-5 Sat & Sun 10 - 5PM — Cal State Northridge, 18111 Nordhoff Street, Northridge (In Student Union)
HOT Show Mar 19 Sunday 10 - 5PM — SOUTH BAY: Carson Center, 801 E. Carson Street, Carson (corner of Avalon & Carson)
HOT Show Mar 25-26 Sat & Sun 10 - 5PM — PASADENA Convention Center, 300 E. Green Street, Pasadena
AMERICAN MEGA SHOWS 818-961-3782 Fax: 818-961-0933
$1 OFF COUPON | FREE PARKING

Your Final Source For Computer Solutions.

COMPUTER BUSINESS CENTER

Santa Monica
2811 Ocean Park
(310) 452-2027
FAX (310) 452-5548

Buena Park
6800 Orangethorpe Ave. #J
(714) 562-0268
FAX (714) 562-0269

Simi Valley
2139 Tapo Street #10
(805) 584-8307
FAX (805) 584-8379

Hours
Mon-Fri: 8:30-6:00
Sat: 10-4

PENTIUM Intel PCI Motherboard
w/3PCI Slots & 256K Cache, Heat Sink & Cooling Fan.
Built-in IDE & I/O (2S/1P/1G)
8MB RAM
540MB IDE Hard Drive
Teac 1.2 or 1.44MB Floppy Drive
PCI Graphics Accelerator Card w/1MB
15" SVGA Monitor (1024x768) .28 (Low Radiation) NI
101 Enhanced Keyboard & Mouse
Mid Tower or DeskTop Case w/Power Supply

INTEL 586DX-90MHz
$2399

Pentium 66
Pentium 66MHz System
8MB RAM, 256K Cache
420MB IDE HDD
14" SVGA Monitor, N.I.
Enhanced 101 Keyboard
PCI SVGA Card 1MB
PCI Integrated IDE & I/O
3.5" 1.44 Floppy Drive
Microsoft Compatible Mouse
Mid Tower Case w/CPU Fan

$1995

CITIZEN
Authorized Sales/Service

GSX 190 NEW	$179
GSX 240 NEW	309
GSX 130	275
GSX 145, 1 32 COL	409
200GX, 9 Pin	169
Color Option	49/69

COLORADO
MEMORY SYSTEMS INC.

Internal 120MB	$119
Internal 250MB	189
Trakker 120MB	299
Trakker 250MB	349

EPSON
AUTHORIZED DEALER

LX-300, 9 Pin	$179
LQ-570+, 24 Pin	275
FX-870/FX117	279/369
LQ-870/LQ-1170, 24 Pin	449/609
LQ-1070 24 Pin, 132 Col.	395
LQ-2550 24 Pin, High Speed	899
DFX-5000 9 Pin, 533 CPS	CALL
AP 3250, 24 Pin Narrow, 200 CPS	189
AP 3260, 24 Pin Narrow, 216 CPS	209

Laser

Actionlaser 1500, 6PPM	$689
EPL-8000 Laser, 10PPM, 1MB	899

All Accessories Available

HEWLETT PACKARD

HP LaserJet 4L w/Toner *After Rebate	$539*
HP LaserJet 4ML w/Toner	969
HP LaserJet 4P w/Toner	939
HP LaserJet 4MP w/Toner	1299
HP LaserJet 4 Plus w/Toner	Best Price
HP LaserJet 4M Plus w/Toner	Best Price
HP LaserJet 4V w/Toner 16PPM	NEW $1879
HP LaserJet 4MV w/Toner 16PPM	2699
HP LaserJet Color w/Toner	Call
HP LaserJet 4SI w/Toner	Call
HP LaserJet 4SI MX w/Toner	Call

INKJET PRINTERS

Deskjet/Deskwriter 540	$279
Deskjet/Deskwriter 560C	469
Deskjet/Deskwriter 320	309
Deskjet/Deskwriter 320 w/cut sheet feeder	359

SCANNERS

HP ScanJet IIIP w/CTRL	$499
HP ScanJet IICX w/ISA CTRL	899
HP ScanJet IICX w/Mac CTRL	899
HP ScanJet Doc. Feeder	489

MACINTOSH
Apple Power Macintosh 6100/60
$CALL for pricing and configurations

Power Macintosh 7100/66
66MHz Power PC 601 Microprocessor
$CALL for pricing and configurations

PowerBooks

PB 520 4/160	$2088
PB 520C 4/160	2648
PB 520C 12/320 + Modem	3548
PB 540C 4/320	4348
PB 540C 12/320 + Modem	4948
PB 540C 12/500 + Modem	5188

PowerBook Special
DUO

Duo 270C 4/240 Active Matrix Color 68030/33MHz	$2468

Power PC Specials

6100/60 8/160	$1398
7100/66 8/250-CD	2148

Power Macintosh 8100/80
80MHz Power PC 601 Microprocessor
$CALL for pricing and configurations

Quadra 630 33MHz 68040 CPU	
Power PC Upgradable 4/250	$1198

Free Custom Configuration

MISCELLANEOUS

Parallel Port TB 525MB EXT	$599
Parallel Port Ext. CD ROM (Single Speed)	269
Parallel Port Ext. CD ROM (Dual Speed)	399
Phillips (LMSI) IDE INT. KIT(Complete)	99
Int. Fax Modem 9600 Send/Receive	79
Int. Fax Modem 14.4 Send/Receive	99

MONITORS

Sony	Call
NEC	Call
Super Mac	Call
Radius	Call

NEC MONITORS

SVGA 14"	1024x768	$325
Multisync 3V 15"	1024x768	475
Multisync 3FGE 15"	1024x768	575
Multisync 4FGE 15"	1024x768	649
Multisync 5FGE 17"	1024x768	975
Multisync 5FGP 17"	1280x1024	1095
Multisync 6FGP 21"	1280x1024	1929

OKIDATA PRINTERS
Authorized Dealer

OL400E
• 4PPM • 300DPI • 512K RAM • 100 Sheet Tray
After Mfg. Rebate $349*

OL410E
• 4PPM • 600DPI • 2MB Ram
• 100 Sheet Tray $645

OL410/PS
• 4PPM • 600DPI • 2MB Ram • Postscript
Scalable Fonts • Mac Compt. • Apple Talk
Built-in $879

ML320/321
• 300 CPS • Dot Matrix • 9 Pin $319/429

ML590/591
• 360CPS • Dot Matrix • 24 Pin • Color
Option • 2yr. Warranty $429/569

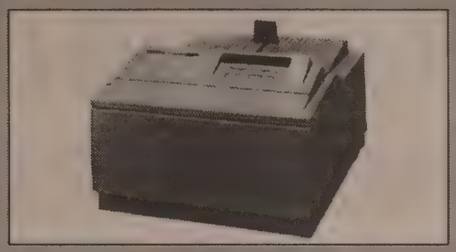
DOC IT
• ALL IN ONE • 8PPM Laser • FAX Machine
• Scanner • Copier
CALL FOR DEMONSTRATION

486DX2-66VLB Turbo System

INTEL 486DX2-66 CPU w/Fan
ZIF Socket 256K Cache
4MB Memory
420MB Hard Drive
1.44MB Floppy Drive
32-Bit VLB SVGA Card w/1MB
32-Bit VLB HD/FD Controller
2 Hi-Speed Serial Ports
1 Hi-Speed Parallel Port
101 Keyboard, Hi-Res Mouse
14" N-I .28 (1024x768) Monitor
Mini Tower Case

$1195

HP LaserJet 4V



•16ppm
•250 Sheet Paper Tray
•8 1/2x11 & 11x17 Built-in
•4MB Ram
•600dpi Res.
•Optional lower tray

$1890

EMC 14" Flat Mono Monitor

$75

AutoCad Release 12

$1995

AutoCad Release 13

$2495

IBM ThinkPad

510Cs 200MB SUBNOTE STN COLOR DISPLAY

•IBM 486SLC2 50MHz
•200MB HD
•4MB RAM
•3.5" 1.44 Floppy Drive
•1 PCMCIA Slot
•Track Point Mouse
•Color VGA Display
•PC DOS 6.3
•1 Year Warranty

IBM ThinkPad

755Cs 340MB NEW MODEL 100MHZ COLOR NOTEBOOK

•Intel 486 DX4 100MHz
•340MB HD 8MB RAM
•3.5" 1.44 Floppy Drive
•2 PCMCIA Slots
•Track Point Mouse
•10.4" Active Color Display
•IBM DOS 6.3 & Windows 3.1
•3 Year Warranty

$Call

IBM ThinkPad

360Cs 170NB STN COLOR NOTEBOOK

•Intel 486 SX 33MHz
•170MB HD (340MB Available)
•4MB RAM
•3.5" 1.44 Floppy Drive
•2 PCMCIA Slots
•Track Point Mouse
•STN Color Display
•IBM DOS 6.3 & Windows 3.1
•1 Year Warranty

$2295

ThinkPad 360CE 340MB DX 50MHz Active Color **$3629**

755Cs 340MB

STN COLOR DISPLAY

•Intel 486DX2 50MHz
•340MB HD (540MB Available)
•4MB RAM
•3.5" 1.44 Floppy Drive
•2 PCMCIA Slots
•Track Point Mouse
•9.5" STN Color Display
•IBM DOS 6.3 & Windows 3.1
•3 Year Warranty

$3649

IBM Notebooks

ThinkPad360	170/340	$1849/$2229
ThinkPad360CS	170/340	$2279/$2649
ThinkPad 360C	170/340	$2745/$2899
ThinkPad 360CE	170/340/540	$2529/$2929/$3279
ThinkPad 755CS 50MHz	170/340/540	$3199/$3649/$4049
ThinkPad 755CS 75MHz	170/340/540	$3669/$4149/$4499
ThinkPad 755C 50MHz	170/340/540	$4259/$4719/$5079
ThinkPad 755C 75MHz	170/340/540	$4629/$5089/$5499

•755CE 540MB $6645
•755CE 810MB $7195

CALL FOR OTHER IBM PRODUCTS

SPECIAL LIMITED QUANTITIES

IBM Notebook

PS1, 486, SL, 25MHz
400MB RAM, 120MB HardDisk

MONO $995
COLOR $1295

HP IV Recondition	$849
HP III Recondition	$725
DeskJet 520 Recondition	$185
DeskJet 500C Recondition	$225
DeskJet 550C Recondition	$295
DeskJet 560C Recondition	$400
HP IICX	$600*
HP FAX 900	$420*

*AFTER MFG REBATE

Creative Labs Discovery Kit

Double Speed CD-ROM Drive
320ms 300kb/sec
Sound Blaster 16 bit stereo,
CD quality Sound Card
Includes Groliers
Encyclopedia, Games
and More.
Amplified Speakers Included!

$259

U.S. Robotics 14.4 Modem/14.4 Fax

V42 & V42bis, high speed data and fax, ultra low cost, ultra high performance. Comes complete with FaxWorks Software

$99

Internal 28.8K Fax/Modem

$149

TOSHIBA

PORTEGE *T3600CT 250MB*

Active Matrix Color Display

•Intel 486DX 50MHx Processor
•8MB RAM •250MB HD
•1.44MB Floppy Drive
•1 PCMCIA Slot/VGA Display
•AccuPoint Mouse
•MS DOS 6/Windows 3.1
•3 Year Warranty

$3399

T1910 486SX/33, 200MB, STN MONO	$1299
T1910CS 486SX/33, 200MB, STN COLOR	$1799
T1960CS 200MB, 486DX2/50, DUAL-SCAN	$2099
T1960CS/320MB, 486DX2/50, DUAL-SCAN	$2269
T1960CT/200MB, 486DX2/50, TFT COLOR	$2679
T1960CT/320MB, 486DX2/50, TFT COLOR	$2839
T2400CS/250MB, DX2/50, DUAL-SCAN CLR	$2679
T2400CS/320MB, DX2/50, DUAL-SCAN CLR	$2789
T2400CT/250MB, 486DX2/50, 8MB, TFT CLR	$3249
T2400CT/320MB, DX2/50, 8MB, TFT COLOR	$3369
T4700CT 486DX2/50, 200MB HD, 8MB CLR	$3829
T4700CT 486DX2/50, 320MB HD, 8MB CLR	$4299
T4800CT 486DX4/75, 500MB HD, TFT CLR	$4659
T6600C 486DX2/66, 510MB HD, TFT-LCD	$5349
T6600C/CD 486DX2/66, 510MB, TFT-LCD	$5849

PORTEGE *T3400CT 120MB*

Active Matrix Color Display

•Intel 486SX 33MHz Processor
•4MB RAM
•120MB HD
•1.44MB Floppy Drive
•1 PCMCIA Slot/VGA Display
•AccuPoint Mouse
•MS DOS 6/Windows 3.1
•3 Year Warranty

$1795

TOSHIBA T-4700 CT

•Intel 486DX2-50
•8MB RAM
•200/320MB Hard Drive
•Trackball
•DOS & Windows
•3 Year Warranty

$3829/$4099

386SX/40MHz Barebones

• Mini Tower Case
• 40 MHz 386SX MB
• 1.2 OR 1.4 MB
• Floppy Drive
• Hard & Floppy
• Controller IDE
• 101 Key Keyboard
• Clock/Calendar
• 2 Serial Ports/ 1 Printer Port/Game

$245

386DX/40MHz W/128K Cache Barebones

• Mini Tower Case
• 40 MHz 386 DX w/128K Cache
• 1.2 OR 1.4MB
• Floppy Drive
• Hard & Floppy
• Controller IDE
• 101 Key Keyboard
• Clock/Calendar
• 200 Watt Power Supply
• 2 Serial Ports/ 1 Printer Port/Game

$299

486DX/66MHz W/256K Cache

• Mini Tower Case
• 66 MHz 486 DX w/256K Cache
• 1.2 OR 1.4MB
• Floppy Drive
• Hard & Floppy
• Controller IDE
• 101 Key Keyboard
• Clock/Calendar
• 200 Watt Power Supply
• 2 Serial Ports/ 1 Printer Port/Game

$595

Prices Subject to change w/out notice. Financing & Leasing Available. EASY QUALIFYING! ****PM=Per Month

Attention Multimedia Advertisers!

Reach California's early adopters and industry insiders in the multimedia market with an advertisement in

MicroTimes' *MultiMedia & Beyond*

- **The most** cost-effective advertising buy to reach the dynamic California marketplace—people who are buying now!
- **230,000** issues strong throughout California—the hottest multimedia regions in the country-the San Francisco Bay Area and Greater Los Angeles.
- **The place** to break new announcements or test-market your product or service.

Call today for advertising information:
In Northern California: (510) 934-3700
In Southern California: (213) 851-8600

MicroTimes'
Multimedia & Beyond:
Providing information and resources to the producers and consumers of multimedia.

Multi & Media beyond

VALUE COMPUTING

PENTIUM POWER

- •**Intel Pentium** CPU
- •**16MB RAM**, 256K Cache
- •**540MB** IDE Hard Drive
- •PCI **64Bit 2MB** Graphics Accelerator
- •PCI IDE Controller Card
- • **15" .28 SVGA** 1280x1024 N-I Monitor
- •1.44MB Floppy Drive
- •101 Enhanced Keyboard
- •MS DOS 6.2 &WIN 3.11
- •2S, 1P, & 1G Port
- •Mouse

intel inside pentium

PENTIUM 66MHz $1775
PENTIUM 90MHz $2095

486VLB EXTRA

- •**EXTRA** SPEED AM 80 or 100MHz
- •**3.3V Low Power CPU**
- •**8MB RAM**, 256K Cache
- •**420MB** IDE Hard Drive
- •**VLB Graphics** Accelerator with 1MB
- •VLB IDE Controller W/ 2S, 1P, 1G Card
- •**14" .28 SVGA** 1024x768 N-I Monitor
- •1.44MB Floppy Drive
- •101 Enhanced Keyboard
- •MS DOS 6.2 & WIN 3.11
- •2 S, 1P, & 1G Port
- •Mouse

$1145

VLB486DX4 100 $1275
16MB RAM Upgrade Add $250

486-66 MULTIMEDIA

- •**IBM Made VESA Local Bus MainBoard**
- •**486SLC2 66MHz**, 16K Internal Cache
- •**4MB RAM**, 64K External Cache
- •**420MB** IDE Hard Drive
- •**VLB Graphics** Accel. with 1MB
- •**VLB 32 Bit IDE** Hard Drive Controller
- •**14" .28 SVGA N.I.** Color Monitor
- •1.44MB Floppy Drive
- •101 Enhanced Keyboard
- •2S, 1P, 1G Port
- •Mouse
- •**2X Multimedia Kit*** (See Below)

IBM

$999

SAVE ON DISKDRIVES

210MB IDE...	$155
420MB IDE...	$185
540MB IDE...	$220
850MB IDE...	$295
1GB IDE, 10MS...	$455
1GB SCSI-2, 9.5MS 5YR.	$525
QUANTUM 1.4GB, SCSI-2, 9.5MS	$CALL
QUANTUM 2.1GB, SCSI, 9.5MS	$1,025
MICROPOLIS 1GB SCSI2/IDE, 8.5MS	$595
MICRLIS 1.7GB, SCSI2/IDE, 10MS	$935
3GB, 4GB, 9GB Fast Wide SCSI...	$call
CONTROLLER	
IDE W/ IO ISA...	$11
IDE W/ IO VLB...	$17
ENHANCE IDE W/ FAST IO ISA...	$35
ENHANCE IDE W/ FAST IO VLB...	$45
ENHANCE IDE W/ IO PCI...	$35
PCI SCSI-2 NCR...	$75
PCI SCSI-2 ADAPTEC 2940 KIT...	$225

SAVE ON VIDEO

	1MB	2MB	4MB
ISA 1MB SVGA	$55	$N/A	$N/A
Trident CXI9440 VLB	$75	$115	$N/A
PCI Accelerator	$110	$165	$N/A
Diamond Stealth 64	$145	$185	$N/A
S3 864 Dram Accelerator, PCI or VLB			
Diamond Stealth 64	$N/A	$275	$395
S3 964 Vram Accelerator, PCI			
Diamond Viper SE	$N/A	$285	$CALL
Spider Graphic PCI 64	$120	$175	$275
CL5434 64Bit Dram Accelerator PCI or VLB			
Spider Graphic PCI 64	$N/A	$235	$375
S3 964 64Bit Vram Accelerator PCI or VLB			

We are the Spider Graphics distributor please give us a call for quantity pricing .
Please Call For ATI, #9, Matrox Video Board ...

MONITOR SPECIAL !!!
Samtron 17" .28Dpi, Flat, 1280x1024
Low Radiation, Digital ...**$625**

MULTIMEDIA KITS

W/ SYSTEM PURCHASE ONLY

•2X KIT ...$199
MediaVision 16bit Sound Card
Double Speed CD-ROM
Amplified Stereo Speakers
14 CD Titles*

•4X KIT ...$295
SoundBlaster 16 Sound Card
Quad Speed CD-ROM
(Mitsumi 600kb, 195ms)
Amplified Stereo Speakers
14 CD Titles*

•4X SCSI-2 KIT ...$445
SoundBlaster 16 SCSI-2 Sound Card
Quad Speed CD-ROM
(Toshiba 3501, 600kb, 125ms)
Amplified Stereo Speakers
14 CD Titles*

*** 14 CD Titles:** Compton Inter Ency., U.S & World Atlas, Mavis Typing Tutor, ChessMaster 3000, 9 CD-Games Robocop 3D, F29, PushOver etc.

Save On Motherboards

Motherboards with CPU	0MB	4MB	8MB	16MB
VESA LB 486DX/2 50MHz	225	375	525	665
VESA LB 486DX/2 66MHz	255	395	555	695
486 & PENTIUM (NO CPU)	225	355	495	725
PCI Pentium 60MHz	525	0	825	965
PCI Pentium 66MHz	575	0	875	1015
PCI/VLB Pentium 90MHz	825	0	1125	1425

Save On Standard SIMMs

1MB x 9 (3 Chip)	38.50	2MB (72PIN)	85.00
1MB x 9 (9 Chip)	42.00	4MB (72PIN)	155.00
4MB x 8	125.00	8MB (72PIN)	295.00
4MB x 9	139.00	16MB (72PIN)	595.00
16MB x 9	CALL	32MB (72PIN)	1256.00
256 x 36	59.00	16MB x 36	CALL

MEMORY UPGRADES

OUR MEMORY UPGRADES ARE
MANUFACTURED BY
Kingston TECHNOLOGY CORPORATION
DESKTOPS • NOTEBOOKS • PRINTERS

brother · Canon · COMPAQ · DELL · SHARP · ZENITH · IBM · LEXMARK · TOSHIBA · NEC · Apple® Macintosh · EPSON · AST · Acer · Panasonic Office Automation · HEWLETT PACKARD · OKIDATA

COMPUTiX

3480 W. Warner Ave. Suite. D, Santa Ana, CA 92704
Sales: (714) 540-5131
Technical: (714) 540-6217 Fax: (714) 540-5139

UNINEX Corp.

5401 Telegraph Rd., City of Commerce, CA 90040
Sales: (213) 890-9246
Fax: (213) 890-9249

VISA · MasterCard

All Brand Names And Trademarks Are of Their Respective Companies • Prices, Availability, And Specifications Subject to Change Without Notice

FREE LABOR • FREE INSTALLATION • FREE LABOR • FREE INSTALLATION

ACER • ALR • APPLE • AST • AT&T • DELL • EPSON • CANON • COMPAQ • DEC

PANASONIC • POQET • SAMSUNG • SHARP • SUN • TANDON • TI • TOSHIBA • ZENITH

WESTERN DIGITAL

540MB
$215
HARD DRIVE

SUPER LOW PRICES!
COMPUTER PRICE WAR
HAS BEEN LAUNCHED BY
KATRONIC TECHNOLOGY

COMPUTER SALES & SERVICES
WE DELIVER ADVANCED TECHNOLOGY
Excellent Quality • Reliable Service • Competive Prices

MEMORY SIMM

1MB SIMM (3 Chips)	$30
4MB SIMM, 70ns	$119
1M * 36 (4MB), 70ns	CALL
2M * 36 (8MB), 70ns	CALL

MEMORY PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MICROSOFT MOUSE

ONLY
$25!

14.4K INTERNAL FAX/MODEM

V32, V32bis, V42, V42bis w/MNP5
$55

CD-ROM + Sound Card

DOUBLE SPEED INTERNAL
Only $245!
W/SPEAKER + 5 CD TITLES!

IPM

486DX-2/66MHZ
$1090

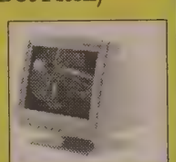
- Medium Tower Case w/Double Fans
- 230W Power Supply
- MB 486DX-2/66MHz
- 4MB RAM
- DR 1.44
- FDD/HDD Controller + I/O
- 420MB 12ms IDE Hard Drive
- Microsoft Mouse
- SVGA 32 Bit w/1MB RAM
- 14" Non-Interlaced SVGA Monitor Shamrock
- 101 Key Maxi Keyboard
- VESA Local Bus

intel inside
VESA LOCAL BUS

486DX4/100MHZ .....CALL!

15" SVGA MONITOR

(1280x1024, .28mm Dot Pitch)
Model SRC - 1502
Digital Color Monitor



$299
SHAMROCK

CASES

Mini + P/S	$39
Medium + P/S	$59
Full Size + P/S	$85
Desktop + P/S	$45
Black Cases	CALL

PENTIUM SYSTEM 60/90MHz

- Medium Tower Case + 230W Power Supply
- Pentium MB 60/66MHz
- 4MB Memory
- DR 1.44
- 420MB Hard Disk
- PCI Diamond Stealth w/2MB
- 14" SVGA Monitor
- Microsoft Mouse
- 101 Keys Keyboard
- IDE w/I/O Vesa Local Bus

CALL (60MHz) $1860 (90MHz)

COMPONENTS

MB 486DX/XX VESA	$89
MB 386DX/40	$90
Trident VLB 32	$65
Shamrock 14" N.I.	$205
250MB Tape Colorado	$155
Diamond Stealth VLB	$149
AT I/O + FDD/HDD VLB	$15
KB 101 Keys	$25
Pro Audio Spectrum 16	$145
Promise IDE Caching Controller	$109
Hard Disk 420MB	$199
All SCSI Hard Disk	CALL

UPGRADE CLONE SYSTEM

Replace The Motherboard + CPU + Memory

ANY SYSTEM TO
* IBM 486SLC-66MHz w/1MB..$195
* MB 386DX-40MHz w/128K Cache + 1MB Memory.....$129
* MB 486DX2-66MHz w/256K Cache + Cooling Fan + 01MB Memory$330

FREE LABOR!

TRADE-IN 30pin SIMM to 72pin SIMM MODULE!
LOW PRICE

FREE INSTALLATION

FOR:
HARD DISK • CD ROM • MOTHERBOARD • ALL MISCELLANEOUS HARDWARE & SOFTWARE (If you order from KATRONIC)

KATRONIC COMPANY

(714) 897-3234 or (714) 895-2084

FAX: (714) 897-9853
14382 HOOVER ST., SUITE A9,
WESTMINSTER, CA 92683

ONE YEAR WARRANTY PARTS & LABOR

MasterCard VISA

FREE LABOR • FREE INSTALLATION • FREE LABOR • FREE INSTALLATION

User Group Network

BULLETIN BOARDS

MULTIZONE

4Next GT BBS. (310)420-4788, 529-7452; (714)956-4698, 559-4669, 831-9043; (818)330-7151; (909)592-9833. 8-N-1, 24 hrs., up to 28,800. 72 lines. Internet, FidoNet, chat, games, CD-ROMs, and more. Free trial. Sysop: Chris Eden. [Exp. #135.]

A-Men BBS. (213)294-2927, 651-0507; (310)366-7865; (818)785-1679. 24 hrs., 2400–14,400. Bi, gay, straight, curious; SoCal's hottest men; more. Adult men only. Fee, verification required. Sysop: John Whyman. [Exp. #133.]

Atlantis, The Lost BBS. (714)256-1360, 828-6459; (818)859-6300, 579-4143, 798-4007. 2400–16,800. RIPterm, multiline chat, MajorMud, four-person Doom, forums, and fun. Sysop: Ron DeRuyter. [Exp. #135.]

Aussie BBS. (310)425-5710, 835-4800; (714)670-6500, 537-4300, 572-8800; (818)537-5005, 961-1700. 18 14,400 lines. 35,000+ files, TradeWars 2002, 30 multiuser games, Internet, RIP support. Free trial. Sysop: Mike Szabados. [Exp. #135.]

The Castle. (213)293-0070, 936-9951; (818)637-8339, 794-0302, 985-6075. 14,400. 50 lines. MUDs, games, chat, 20GB library, Internet, and more! Free trial. Sysop: Steve de Mena. [Exp. #134.]

Compu-Net BBS. (310)822-0038, 544-4095; (818)782-3623. Internet access. CompuScans, CD-ROMs, dating, adult, windows, IBM, Mac. [Exp. #134.]

Crystal Palace. (310)472-2598, (818)765-2171. 8-N-1, 24 hrs., 300–14,400. 15+GB of GIFs, stories, shareware; Netmail; msg. database; matchmaker; games; computer store. Sysop: Daniel Mathis. [Exp. #133.]

CyberChat BBS. (310)441-1465, (818)784-0007. 2400–14,400. Chat, younger crowd, CD-ROM, gay/bi sections, trivia, games, adult files. Sysop: Spyke. [Exp. #133.]

Digital Excursion. (213)874-9895; (818)951-9377, 951-9477. 24 hrs., 28,000. Offers graphical interface for Mac/Windows; CD-ROMs, OneNet. Free trial. Sysop: Nathaniel Lord. [Exp. #134.]

EDEN—The Electronic Garden. (310)421-2420; (714)548-1900, 530-6335. 24 hrs., 14,400. 32 lines. Adults only "playground," featuring chat, games, email, forums, files, and fun. Sysop: Daniel Vesely. [Exp. #135.]

KBBS Los Angeles. (213)725-3047; (310)558-0145; (805)520-7323; (818)886-0872. 300– 28,800. 68 lines. 30GB shareware, adult; chat, full Internet, Usenet, coffee meets. Free trial. [Exp. #134.]

LA Online. (213)936-1160; (310)372-4050, 445-0633; (818)577-2131. 8-N-1, 1200–14,400. News, movie times, events, shopping, publications. Always free. [Exp. #134.]

Miller's Party Board. (213)727-0251, 569-9191; (310)815-0117, 212-3469, 929-4304; (714)739-1060, 537-4436; (805)583-3142; (818)879-1333, 700-0627, 240-8296, 769-2302, 577-5880, 961-2458. 14,400. 32 lines. Chat, live games, 4GB library, pub areas, WorldLink, and more. 14-day free trial. Sysop: Jack Stern. [Exp. #134.]

Modemboy BBS. (310)659-7000, 417-5157; (818)846-3000, 996-7900. Gay/bi/curious? Free chat, instant access, 18+, local events, campy fun. [Exp. #135.]

Modem Butterfly's BBS. (310)841-6900, 767-1010, 421-9231; (714)828-5500; (805)581-0700; (818)842-6900, 787-6900, 454-1919, 887-7900. Intelligent fun, good ratio of women, local events, contests, 1GB library. Instant access. Sysop: Karen Zoldan. [Exp. #135.]

Mr. Wonderful's Lair. (213)261-8055, (818)451-0874. 24 hrs., up to 28,800. Internet, echomail, games, shareware, adult, 12 CDs. Free 14-day account. Sysop: Mr. Wonderful. [Exp. #133.]

Prism. (310)799-0380; (714)454-9242, 638-7249, 642-6256. 8-N-1, 24 hrs., 300–28,800. 32 lines. 4.5GB, Internet, MajorNet, TradeWars 2002, adult areas, social events. Instant access. [Exp. #135.]

The Rising Phoenix. (310)425-7404, 599-7448, 529-7421; (714)255-1823, 635-5058, 832-6032, 995-3010. 300–14,400. 24 lines. Family board, files, chat, TradeWars 2002, trivia, games. Free trial. [Exp. #133.]

Southland BBS. (213)962-8191, (818)793-9108. 14,400. Internet email, Usenet newsgroups, Linux, chat/MUD, MatchMaker (17K+ users). Sysop: Joseph

LEGEND Graphics Online

SuperVGA Photo Images

Adult GIF's, MoviePICs

Download Computer Graphics of tomorrow, today!

Nation's One Stop Graphics BBS

Modem: (909) 689-9229

(NO per min./hrly fees)

VISA MasterCard AMEX

The Motherboard

44 Lines Social BBS, 5 Gig library w/CD-ROMS. Interactive multi-player games.

Fidonet and Internet. Noise free digital lines. 2-week Free Trial!

...A Whole New World Online 1-800-862-3003

Internet

28.8 kbps. $29.95. No setup fee.

- A Standard Account offers you the whole power of the Internet with a **full SLIP/PPP Internet connection**—100 hrs./month for $29.95.
- A Taste of the Internet is just $9.50 a month for 4 hours of **full Internet access.**
- Publish your information on our T1-connected **World Wide Web** server.
- Never a setup fee for Standard, Taste, or Web services.
- Ask us about network connections via leased lines or Frame Relay.

For voice information, call 818.858.9261

Lightside

818.858.9261 voice
818.858.8982 fax
818.858.9283 bbs (login guest, password guest)
E-mail robot: info@lightside.com
E-mail human: lightside@lightside.com
World Wide Web: http://www.lightside.com/
Prices subject to change

BBS Spotlight

By John Wolcott

BBSing Made Wonderful

Catering to all age groups, Mr. Wonderful's Lair is indeed a wonderful experience. Coming to you live from the heart of East Los Angeles, this BBS supports four incoming phone lines at modem speeds up to 14,400 baud.

The BBS was originally started by Sysop Dan Barcenas to provide local file support for Sierra On-Line Games. Regular public access became available in June of 1993. Although the current number of incoming lines limits the number of active users, system expansion plans include more lines in the immediate future. It is a full-featured BBS offering services for a nominal subscription fee.

The Sysop is enthusiastic about furnishing a BBS with something for everyone. Barcenas commented, "It's a lot of fun to provide a BBS that can entertain and inform so many users. I take particular pride in having developed special features for the online game Barren Realms Elite. It's much more than the ordinary BBS can offer."

Mr. Wonderful's Lair operates primarily as an "alias based" BBS, allowing you to choose a clever title for yourself; with the exception that international email networks require use of your real name. When first logging on, you'll be required to provide some basic personal information. You'll receive a two-week trial subscription allowing limited use of BBS functions. Access to all of the features requires subscription, and for adult-oriented file areas, submission of a signed disclaimer form with proof of age is required.

System features include a message menu, a file menu, online games, bulletins, and chatting with other nodes. These basic amenities will provide most of the BBS features you'll ever need.

The message menu allows information to be exchanged with other BBS users; with local, national, and Internet messaging access. Communicating information with local and national users will expand your computer experience beyond your desktop. BBS-based networks featured for exchanging email include WildNet, PlanoNet, Intelec, ThrobNet and HotNet to provide discussion of almost any topic imaginable. Internet access is a new and sensational commodity among local BBSes; opening a floodgate of information for the ordinary BBS user.

The number of files available for download will amaze you. Mr. Wonderful's Lair features a 1.3GB drive for uploads and storage of files plus two Pioneer 604X quadruple speed CD-ROM changers with twelve CD-ROMs online and a truckload of shareware and freeware files. Over thirty-seven thousand files are at your disposal, primarily in IBM PC compatible format, with support for all popular file transfer protocols. Files uploaded are automatically virus-scanned with Transcan v5.10 for your protection.

Many popular game titles are found here to provide great entertainment for users. The common game titles for dice, dominoes, and cards as well as online adventures are included. You're sure to find something to interest you for hours of gaming pleasure.

The bulletin menu will acquaint you with all aspects of system operation and news. Each time you log on, you are notified of any new bulletins; keeping you apprised of system changes. If the information you need is not presented here, the Sysop or a Co-Sysop is usually available to help you.

Although teleconferencing is not yet a big draw for system subscription, you may chat with other users in realtime. Clever action commands may be used in chat to liven your conversation. To obtain a list of available action commands, type "/a" from within the chat menu.

Mr. Wonderful's Lair is a great BBS experience. Subscription rates start at $10 per month and are discounted for longer terms of commitment. You can reach this feature packed system by calling (213)261-8055 with standard modem protocol of 8-N-1. Give this growing BBS a call for a wonderful time. ■

Copyright © 1995 by John Wolcott. All rights reserved.

BULLETIN BOARDS cont.

Gomez. [Exp. #134.]

US Pompeii. (213)878-2801; local numbers for 310, 805, and 818. 8-N-1, 24 hrs., 14,400. Local/international email, Internet, forums, chatlinks. MatchMaker, files, 21+. One month free. [Exp. #134.]

213

BBS Central. (213)464-0200. 24 hrs., 28,800. Multiline, multi-interest, Windows, free Excalibur users terminal. Free 15 min./day. [Exp. #134.]

Biker Network. (213)644-0391. 8-N-1, up to 14,400. Biker GIFs, messages, for sale, lost/found, Mac shareware, CD-ROM research. Sysop: Al Walker. [Exp. #134.]

The Career Network BBS. (213)629-1472, 933-4999. 8-N-1, 7:30 am–1:30 pm, 1200/2400/9600. Hundreds of JOBS! throughout the US; your resume can reach 200+ employers monthly. Sysop: Steven McCormick. [Exp. #134.]

CD-ROM BBS. (213)644-0391. 8-N-1, up to 14,400. Market research, CD news, Who? What? Where? Fee. [Exp. #135.]

Janin BBS. (213)564-0995. 8-N-1, 24 hrs., 1200–14,400. Amateur radio discussion and Internet email. Fee: details online. [Exp. #134.]

LA Collect. (213)661-6299. 8-N-1, 24 hrs., up to 14,400. Civic network, serious talk, new BBS technology, all welcome. Free. Sysop: Roger Eaton. [Exp. #133.]

Mark'System BBS. (213)758-0684. 8-N-1, 24 hrs., up to 14,400. Music, musicians, Mopars, technology, and controversial topics! Free limited access. Sysop: Mark S. Lewis. [Exp. #134.]

OPAMP Online. (213)957-6915. 24 hrs., Technical book catalog, ChapterSearch, computer and other technical disciplines. Free. [Exp. #134.]

Pacific Online. (213)344-4444 @ 2400, 344-4445 @ 14,400. 8-N-1, 24 hrs. 10 lines. Internet email, files, 5GB system, multiplayer games, more. Free/fee. Sysop: Steve Jackson. [Exp. #133.]

The Venture Capital Exchange BBS. (213)623-0887. 8-N-1, 28,800. Home of Evans 1000 Venture Capital Directory, investment proposals, barter deals, more. No fee. Sysop: Mervin Evans. [Exp. #134.]

310

Adult Access BBS. (310)657-5775. 24 hrs., 28,800. Multiline, multi-interest, adult XXX GIFs, free Excalibur users terminal (Windows). Free 15 min./day. [Exp. #134.]

At Last BBS! (310)832-7702. 24 hrs., 1200/14,400. Mulitnode, general family-oriented, 8000+ files in all categories, CD-ROM. Free. Sysop: Robert McAlpin. [Exp. #133.]

The Bizopps Connection. (310)677-7034. 8-N-1, 24 hrs., up to 14,400. Provides listings of business and franchise opportunities; online database; and more. Sysop: Lawrence C. Toliver. [Exp. #135.]

Chaos Online. (310)318-5089, 318-2289. Up to 14,400. Windows shareware, adult GIFs, games, chat, messages, free downloads. [Exp. #134.]

CyberKorea BBS. (310)926-1899. Korean files, Badookgo, forums, Internet email. No fee. [Exp. #133.]

The Dark Crystal BBS. (310)522-9633. 8-N-1, 24 hrs., Message area, shareware, CD-ROMs, Sci-Fi news, Amiga news, adult area. Free. Sysop: Jesus Muniga. [Exp. #134.]

Fantasia BBS. (310)986-9705. 8-N-1, 24 hrs., 2400–28,800. The Carpool lane on the Information Superhighway, Internet, chat, games. Free/fee. Sysop: Brian Andrus. [Exp. #134.]

Gato's Lair BBS. (310)396-9744. 24 hrs., 8-N-1, 2400–28,800. Net echos, online games, email, adult sections, 10:1 ratio. Free. [Exp. #133.]

Health Online. (310)831-6775. 8-N-1, 24 hrs., 1200–28,800. For healthcare professionals, caregivers, patients, people interested in their own health; files. Free. Sysops: Tom and Susan Dorsey. [Exp. #135.]

Independent Filmmakers Forum. (310)425-0012. 8-N-1, 24 hrs., 2400/9600/14,400. Online networking for independents, forums, chat, job listings, free screening passes, and more. Free trial. Sysop: Philip Matuzic. [Exp. #134.]

Mac-Hac'ers BBS. (310)549-9640, 549-9664. 8-N-1, 24 hrs., 300–16,800. All computers, library, technical area, international mail, large graphics area, much more. Free. Sysop: Bud Grove. [Exp. #134.]

Manhattan Online. (310)374-9994. 28,800. Four lines. Windows, DOS, Mac, OS/2, FidoNet, Internet, CD-ROM sales. Free. Sysop: Paul Swanno. [Exp. #133.]

The Möbius Strip. (310)599-7225. 24 hrs., 300–14,400. Registered WWIV board, strong message base, onliners, RPG, instant access. Free. [Exp. #134.]

Mommadillo's BBS And Breakfast. (310)438-7830. 24 hrs. v.42bis WWIVNet @1175. Games, files, good conversation for your online enjoyment. [Exp. #133.]

Moroni BBS. (310)392-3981. 24 hrs., 300/1200/ 2400/9600. Hundreds of Mormon church-related documents plus 650MB of shareware. Free. [Exp. #133.]

One World. (310)372-0987. Ecology, gardening, health, alternative news, international network. Free. [Exp. #134.]

Original Apple Corps BBS. (310)454-4660. Apple II support. Sysop: Ed Molina. [Exp. #135.]

Sable OnLine! (310)768-8372. 1200–14,400. Internet, FidoNet, multiline chat, CD-ROMs online, ASP approved BBS. [Exp. #133.]

Servant Christian BBS. (310)371-2770, 371-3130, 371-0251. 14,400. Three lines. A modem ministry for both Macintosh and Windows users. Administrator: Doug Wade. [Exp. #134.]

South Bay Apple Computer Club BBS. (310)538-1913. 8-N-1, 24 hrs., 1200–14,400. Apple II support and free Internet email access. No fee. [Exp. #134.]

South Bay Apple Mac User Group BBS. (310)792-8083, 792-0264. 24 hrs., Multiline, FirstClass. Administrator: Dr. Dave. [Exp. #134.]

Starfleet HQ II BBS. (310)422-8178. 8-N-1, 24 hrs., 300–14,400. Online games, VNET/IceNet/others, Star Trek news/discussions. No fees. Sysop: Rodney Palmer. [Exp. #133.]

Upper Transylvania BBS. (310)515-6843, 515-6953. 24 hrs., 1200–28,800. 12 family-oriented CDs online, AGAPE Christian Network hub. Free. Sysop: Ron Hoffman. [Exp. #134.]

WorldWorks Symposium BBS. (310)312-3370 or telnet *worldworks.com* . 28,800. Myth-busting information, conspiracy theories, how the world works. No fees. [Exp. #135.]

408

Garlique Graphics Image Center. (408)847-0665, 847-5076. Adult GIFs, Internet newsgroups, shareware, adult CD, instant access. Excellence online. [Exp. #134.]

714

1% Homeseller BBS. (714)990-4802. 8-N-1, 24 hrs., 2400/14,400. Homes for sale in Southern California. Free. [Exp. #134.]

3 Systems In One. (714)969-9624. 8-N-1, 24 hrs., 300–28,800. 14 lines. ANSI and RIP, real estate info, MajorNet forums, email, chat, games. Sysop: Doug Campbell. [Exp. #134.]

Budapest BBS. (714)895-4885. 8-N-1, 24 hrs., 1200–14,400. Bilingual, writers, news, politics, history, anthropology, legends, myths, books, messages. [Exp. #134.]

Check Six BBS. (714)362-8299. 8-N-1, 1200–28,800. Five lines. Flight simulation msgs. and files, Internet, Usenet, SimNet. Limited free access. Sysop: Patrick Gost. [Exp. #134.]

Cloud Lake BBS. (714)768-3585, 830-9384. 8-N-1, 24 hrs., 2400–28,800. 50,000+ files. Science, astronomy, engineering, programming, Windows, DOS, games, and more. Sysop: Ed Barnes. [Exp. #133.]

Crossroads. (714)724-1041. Up to 28,800. 1.2GB online, CD-ROM, adult files. Full access for free. [Exp. #134.]

Eat My Shorts! BBS. (714)827-7776. 8-N-1, 24 hrs., 28,800. 1.2GB adult,

Amateur Action "Live"

ONE•ON•ONE
24 hrs./day

KINKY FOREIGN PHONE SEX
18 yrs & older

10718-1604-821-7911
No long distance charges!
Just $3.99/minute.
No CC Needed

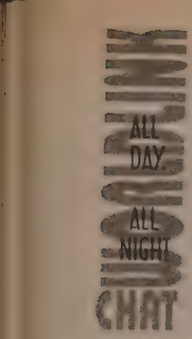
Amateur Action BBS

World's Largest Collection of Amateur Adult GIF Files.
Over 24,000 GIFs on line.
"The Information Super Highway"
"The Nastiest Place On Earth"

(408) 263-3393 28,800 V.FC

40 High Speed Lines
US Robotics 28,800 baud
Modems on all lines
Easy Connection! No Waiting!

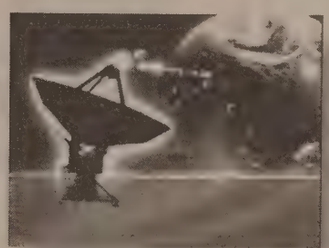
VISA DISCOVER MasterCard

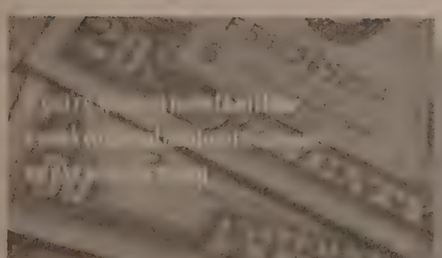


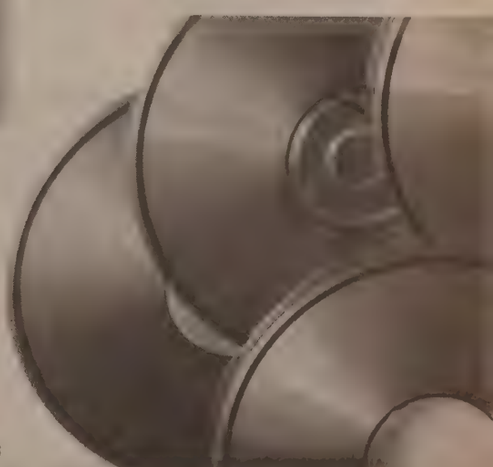
- International MajorNet Registry
- Download full color Member Photos
- Weekly Coffee Meets and Parties
- Detailed User Profiles with Match Rating
- Thousands of Los Angeles area singles online
- Very Successful • over 2 dozen marriages so far!

THE INTERNET

- Telnet to services Worldwide without long distance charges
- World Wide Web Access (graphical and text based)
- Low cost flat•rate access, great for beginners
- Internet Relay Chat • World's Largest Chat System
- PsuedoSLIP TIA for Mosaic and Netscape (SLIP not needed!)
- Over 100 Pre•programmed MUDS and Telnet destinations
- T1 Line for fast throughput
- Finger Server and DNS Lookup
- Archie and Gopher Access
- Your Own Internet E•mail Address
- 1,000 of the most poplar Usenet Newsgroups
- FTP files from remote locations







FILES

- Easy to use point•and•tag interface
- Over 20,000 adult GIFs and animations
- Flat fee access • no surcharges or ratios
- 30 or more CDs online at all times
- All the latest shareware for all computer types
- 28,800 baud modems available for fast downloads

Try it FREE This Week!

MCI CONNECT
Log from anywhere in the USA at 28,800 baud for as little as 7.5 cents/minute!

via modem:
213.725.3047 310.558.0145 805.520.7323 818.886.0872
Local numbers from Ventura to San Juan Capistrano. Call for a complete list.
Age 18 and over only, please. Send e-mail to info@kbbs.com for automatic information response.

Los Angeles x.25 Service by contract with PACIFIC BELL
A Pacific Telesis Company

BULLETIN BOARDS cont.

online games, and netmail. [Exp. #133.]

Global BBS. (714)373-1544. 24 hrs., 2400–14,400. For political junkies! Internet, FidoNet, VirtualNet. Politicians and organizations online! [Exp. #134.]

Graphics Development Association. (714)651-1812. 8-N-1, 24 hrs., 28,800. Adult GIF, RIP, Windows, Amiga, Ray-Tracing, BMP, CAD. $15/yr., parts free. [Exp. #134.]

The Great Escape! (714)631-5112, 894-4329. 10 lines. Nationwide chat, multiuser games, War-of-Worlds, Internet email, more. Free trial. [Exp. #133.]

Happy Trails BBS. (714)547-0719. 24 hrs., 28,800. Seven lines. FidoNet, Internet, UChat, QSO, 2GB downloads. Free trial. Sysop: Don Inglehart. [Exp. #133.]

Hell's Door BBS. (714)891-6083. 8-N-1, 24 hrs., up to 28,800. Features to place this BBS above the rest. Free. Sysop: TNT. [Exp. #134.]

Hillside BBS. (714)362-9675. 8-N-1, 24 hrs., 1200–14,400. Free access Christian BBS. Files, door games, and more. Sysop: Robert Savage. [Exp. #134.]

Infinity BBS. (714)898-3236. 8-N-1, 24 hrs., 300–14,400. Internet, Usenet, satellite fed shareware, games, teleconference, call today! Sysop: Dan Minear (suitcase). [Exp. #134.]

The Irvine "X"Change BBS. (714)552-0589. 8-N-1, 24 hrs., 2400–28,800. Online games, s/w files, messages, bulletins. Free access w/adult fee. Sysop: Richard Neilssien. [Exp. #134.]

L.A. Classifieds. (714)548-2110. 14,400. Free private party classifieds, matchmaker, chat, photos. Free access. Sysop: Jerry Macoy. [Exp. #133.]

Midnight Jungle BBS. (714)280-1503. 8-N-1, 24 hrs., 14,400. Multinode. Chat, six CD-ROMs, adult areas, Internet access, games. Basic access free. Sysop: Chieftain. [Exp. #134.]

The Midnight Mission BBS. (714)848-6808. 8-N-1, 24 hrs., 1200–14,400. Four lines. Large game and XX-GIF file areas. Full access with call back. Sysop: Marty Strech. [Exp. #134.]

Mission Online. (714)258-0707. 24 hrs., 28,800. Multiline. RIP, CD library, forum for programmers and data processing professionals. Free. Sysop: Kurt Steffien. [Exp. #134.]

The Modem Express. (714)994-9502. 14,400. Files, games, doors, chat, multiuser interest. [Exp. #135.]

OrnJuce. (714)778-1228. 8-N-1, 24 hrs., 300–14,400. BBS of the All Computer Assoc. of Orange Co. Supports Atari, Mac, PC, and others. Free. [Exp. #133.]

Pathway BBS. (714)236-4247. 8-N-1, 24 hrs., 1200–14,400. Get into the swing of things. Adults only. Sizzling chat. [Exp. #134.]

Prime Cut Magazine BBS. (714)542-4566. Windows BBS, all adult. You won't believe your eyes! Free look see. [Exp. #135.]

Stitchers Source BBS. (714)589-1718. 8-N-1, 14,400. Needlework, crafting, sewing, etc. FidoNet. [Exp. #133.]

VisuaLink Systems BBS. (714)978-0194. 8-N-1, 24 hrs., 14,400. Prechecked, clean used vehicles. Expertise, digital photographs, condition reports, more. Free. [Exp. #135.]

Weaveworld BBS. (714)378-4779. 24 hrs., 14,400. TradeWars 2002, games, Internet, chatlink, forums, email. Free trial, $10/mo. Sysop: Jerry. [Exp. #133.]

805

SCV PC Users Group BBS. (805)297-7993, 297-7994. 24 hrs., 2400–14,400. Files, Interlec email, Wildcat BBS. $35/yr. [Exp. #134.]

Twilight Zone BBS. (805)258-0413 (16,800), 258-4956 (14,400). 24 hrs., up to 16,800. Games, CD-ROMs, Internet email, FidoNet, MuFon Net, Xtasy Net, adult areas. Sysop: Rob and Liz Ayers. [Exp. #134.]

818

Adult Access BBS. (818)784-5775. 24 hrs., 28,800. Multiline. Full GUI user interface for real Windows point and click. Free 15 min./day. [Exp. #134.]

Avatar Online Systems. (818)969-8227. 24 hrs., 2400–14,400. 32 lines. Family BBS, MajorMudd, TelArena, other games, chats, tutors, forums. Sysop: Nancy Teppler. [Exp. #134.]

Blazin' Bytes BBS. (818)776-2777. 16 lines. Games, pubs/SIGs, chat, warm family-style adult board, women welcome. Sysop: Barbara Mallut. [Exp. #133.]

Caheunga Pass BBS. (818)796-6096, 796-8429. 2400–28,800. Macintosh/IBM welcome, 1GB of shareware, friendly users, great discussions, online games. Internet contact: *boingo@net-com.com* . [Exp. #133.]

Computer One. (818)763-0678. 24 hrs., 14,400. Internet, FidoNet, 20,000+ files, 25 online games, family oriented. Free trial. Sysop: Ed Baker. [Exp. #134.]

David's Amazing BBS & Internet Services. (818)997-7500. 24 hrs., up to 14,400. Showing off the Net with a smile, not a scowl. Free for now. Sysop: David Dennis. [Exp. #135.]

Dr. Tracy Cabot's LoveLine. (818)901-6117. Noon–9 am, 2400–14,400. Private, professional counseling; personalized compatible evaluations; real people, ID-verified! Free browsing. [Exp. #134.]

Earthquake City BBS. (818)368-3337. 8-N-1, 24 hrs., 14,400. Files, messages, games, 1GB online. Free. Sysop: Steven Libis. [Exp. #135.]

Eclair Online. (818)288-0573. 24 hrs., 2400–28,800. Free Internet email; sports, USA Today, CD-ROM, files, weather, more. Free. Sysop: Henry Ho. [Exp. #135.]

Follow Your Heart—Heart Disease Support BBS. (818)776-2778. 24 hrs., For heart disease patients, family, friends, caregivers, plus medical community; caring. Free. [Exp. #133.]

The Galaxy-II BBS. (818)706-0130. Up to 28,800. Three lines. Supports Galaxy-II game. All gamers welcome, LORD, Assassin, more. Free and fee. Sysop: Brett Tondreau. [Exp. #134.]

Gifshoppe BBS. (818)989-0975. 24 hrs., 2400– 14,400. Eight lines. Games, matchmaker, 8GB adult GIFs, ThrobNet, HotNet, WildNet, FidoNet. Sysop: Dan Bauer. [Exp. #133.]

InvestorLink. (818)331-4611. Interested in stocks? Real estate? Commodities? Opportunity? We are the board for the money-minded person. Sysop: Steve Painter. [Exp. #135.]

The Labyrinth BBS. (818)794-0490. 8-N-1, 24 hrs., 14,400. Files, messaging, FREE Internet, user uploads, doors, QWK mail. Free. [Exp. #133.]

The Labyrinth Shareware Registration System. (818)792-2523. 8-N-1, 24 hrs., 2400–14,400. Shareware for free! Register online. Tech support by authors. Sysop: Chris Schurer. [Exp. #133.]

LA Free-Net. (818)776-5000. 8-N-1, 24 hrs., up to 14,400. 16 lines. Nonprofit community network with extensive Internet connections: newsgroups, gopher, email; and more. $10/year. Sysop: Alex Jalinous. [Exp. #135.]

Movers & Shakers—Parkinson's Center BBS. (818)776-2784. 24 hrs. For Parkinson's Disease patients, caregivers, families, friends, and medical community. Warm and personal. Free. [Exp. #133.]

On The Bright Side—Agoraphobia Support Board. (818)776-2781. 24 hrs., For those with agoraphobia/panic disorders, family, friends, caregivers, medical community; caring. [Exp. #133.]

The Open Mind Discussion Club BBS. (818)758-9348. 24 hrs., 300–14,400. Current and topical event discussions, all computers welcome. No fees. Sysop: Bill Greenland. [Exp. #134.]

Panasia BBS. (818)569-3740. 24 hrs., 2400–28,800. Worldwide echomail and Internet email, high-quality file area. Free access. [Exp. #135.]

The SLATE BBS. (818)763-9172. 8-N-1, 24 hrs., 300–14,400. Sports, law, tons of everything, files, original games, and more. Free. Sysop: Robbie Reed. [Exp. #134.]

SONiC Dreams BBS. (818)831-6052. 24 hrs., 1200–28,800. Online games, files, echoes. No fee. [Exp. #134.]

Sugar Free BBS! Diabetes Support Board. (818)776-2779. 24 hrs., For those with diabetes, family, friends, caregivers, medical community; caring. Free. [Exp. #133.]

The Big "C" BBS—Cancer Support BBS. (818)776-2780. 24 hrs., For cancer patients, family, friends, caregivers, medical community; warm and caring. Free. [Exp. #133.]

Valley West Online BBS. (818)888-8419. 8-N-1, 24 hrs., 14,400. Six lines. 70+ games, 2GB, Fun! Donations based. [Exp. #134.]

Wizardry BBS. (818)222-4444. 2400–14,400. Online games, downloads, uploads, adult GIF and text files. Free. [Exp. #134.]

909

CafeXpresso: An Electronic BBS Coffeehouse. (909)944-

714

Exotico

BBS
Adult Games, Topics, 1000's Pictures
Internet access via alias
25,000+ hot files
200,000+ adult messages
on line
(714) 453-9524
8N1 19200

(must be 18 or older)
$25.00 per year, one hour a day

Hot Modem Fun!
Press Any Key To Continue!

- Live CHAT in Groups or Private!
- Uncensored, Nightclub Atmosphere!
- Large XXX GIF & Shareware Libraries!
- Live **Internet** Access w/Custom Interface!
- Matchmaker "Dating-Base"!
- Live Modem to Modem Gaming!

Plus Much, Much, More!

Local Numbers Nationwide!

Join Today - Call By Modem Now!
818-358-6968
Over 18 8-N-1

High Quality, Low Prices, Is Our Pro!

ADVANCE PRO TECHNOLOGY

15437 PROCTOR AVE.
CITY OF INDUSTRY,CA 91745
TEL: (818)336-8960
FAX: (818)336-3221
Mon. - Fri. 9:00 am - 6:00 pm
Sat. 10:00 am - 4:00 pm
Sun. - by appointment

PENTIUM PCI LOCAL BUS SCSI MASTER

PENTIUM 100MHz	CALL
PENTIUM 90MHz	$3,[illegible]

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIF SOCKET
- 256K CACHE MEMORY
- 16MB RAM (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- TEAC 1.2 MB & 1.44 MB DUAL FDD
- 1 GIG SCSI III 8MS HDD
- ADAPTEC 2940W PCI FAST SCSI III BUSMASTER
- 64 BIT MATROX ULTIMA 2+PCI W/4MB VRAM
- HI-SPEED I/O (16550)
- DELUXE FULL TOWER CASE
- 300 WATTS POWER SUPPLY (UL)
- MICROSOFT DOS 6.22 & WINDOW 3.11
- FOCUS FK 9000 KEYBOARD
- MICROSOFT MOUSE
- MONITOR NOT INCLUDED

VESA LOCAL BUS SCSI MASTER

INTEL 486DX4-100	$1,[illegible]
INTEL 486DX2-66	$[illegible]
INTEL 486DX-33	$1,[illegible]
AMD 486DX2-80	$1,[illegible]
AMD 486DX2-66	$1,558

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM (EXP TO 128MB)
- 256K CACHE MEMORY
- CPU COOLING FAN & HEATSINK
- TEAC 1.2 MB & 1.44 MB FDD
- 540MB SCSI HARD DRIVE
- 32 BIT VLB ADAPTEC 2842 FAST SCSI II
- 32 BIT VLB DIAMOND STEALTH 64 w/2MB VRAM (UP TO 4 MB)
- 15" SVGA MTR 1280 X 1024 .28 D.P. N-I W/DIGITAL CONTROL EPA ENERGY
- HI-SPEED I/O (16550)
- DELUXE FULL TOWER w/ 2 COOLING FANS
- 250 WATTS POWER SUPPLY
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

VESA LOCAL BUS MULTIMEDIA STANDARD

SPECIAL

INTEL 486DX4-100	Call
INTEL 486DX2-66	$1,158
AMD 486DX2-66	$1,138
INTEL 486DX-33	$1,098

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM 70NS, 256K CACHE
- 1.44 MB FDD
- CPU COOLING FAN & HEATSINK
- 540MB IDE HARD DRIVE
- 32 BIT VLB IDE CONTROLLER
- 32 BIT VLB GRAPHICS ACCELERATOR w/1 MB
- PANASONIC / ACER / SONY (2X) CD-ROM
- SOUND BLASTER 16 COMPATIBLE
- 140W HI-FI STEREO SPEAKER
- 14" SVGA MTR 1024 X 768 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- MS-DOS 6.22 & WINDOWS 3.11 w/MANUAL.....ADD $80
- MICROSOFT FAMILY KIT.....ADD $65
  - MS-ENCARTA '95, MS-WORKS V3.0
  - MS-MONEY V3.0, DANGEROUS CREATURE
  - MS-GOLF, ENTERTAINMENT PACK (8 GAMES)

PENTIUM PCI MULTIMEDIA STANDARD

PENTIUM 100MHz	Call
PENTIUM 90MHz	$1,998
PENTIUM 66 MHz	$1,848
PENTIUM 60MHz	$1,828

- INTEL PENTIUM CPU w/ZIF SOCKET, 256K CACHE
- 8MB RAM 70NS(EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2MB AND 1.44 MB FDD
- 540 MB IDE HARD DRIVE
- PCI ENHANCED IDE CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI ULTRA PRO MACH32 SVGA w/1 MB (UP TO 2 MB)
- PANASONIC / ACER / SONY (2X) CD-ROM
- SOUND BLASTER 16 COMPATIBLE
- 140W HI-FI STEREO SPEAKERS
- 15" SVGA MTR 1280 x 1024.28D.P. N-1
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- MS-DOS 6.22 & WINDOWS 3.11 w/MANUAL.....ADD $80
- MICROSOFT FAMILY KIT.....ADD $65
  - MS-ENCARTA '95, MS-WORKS V3.0
  - MS-MONEY V3.0, DANGEROUS CREATURE
  - MS-GOLF, ENTERTAINMENT PACK (8 GAMES)

PENTIUM PCI SCSI STANDARD

PENTIUM 100MHz	Call
PENTIUM 90MHz	$2,448
PENTIUM 66 MHz	$2,268
PENTIUM 60MHz	$2,238

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIP SOCKET
- 256K CACHE MEMORY
- 8MB RAM (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2 MB & 1.44 MB FDD
- 540MB SCSI II HARD DRIVE
- PCI SCSI II CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI DIAMOND STEALTH 64 BIT w/2 MB VRAM (UP TO 4MB)
- 17" SVGA MTR 1280 x 1024 .28D.P. N-I w/ DIGITAL CONTROL EPA ENERGY
- DELUXE FULL TOWER CASE
- 250 WATTS POWER SUPPLY
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

VESA LOCAL BUS STANDARD

SPECIAL

INTEL 486DX4-100	$ 1,168	AMD 486DX2-80	$ 958
INTEL 486DX2-66	$ 948	AMD 486DX2-66	$ 918
INTEL 486DX-33	$ 888	AMD 486DX-40	$ 898

- INTEL PENTIUM OVERDRIVE READY
- 4MB RAM 70NS
- ZIF SOCKET
- 256K CACHE MEMORY
- 1.44 MB FDD
- GREEN MOTHERBOARD
- CPU COOLING FAN & HEATSINK
- 540MB IDE HARD DRIVE
- 32 BIT VLB WINBOND IDE CTLR w/2S-P-G
- 32 BIT VLB GRAPHICS ACCELERATOR w/1 MB
- 14" SVGA MTR 1024 x 768 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

- 40W SPEAKER.....ADD $24
- 120W SPEAKER.....ADD $50
- 140W SPEAKER.....ADD $54
- MICROSOFT DOS 6.22 & WINDOWS 3.11 w/ MANUAL.....ADD $80

PENTIUM PCI LOCAL BUS STANDARD

SPECIAL

PENTIUM 100MHz	Call
PENTIUM 90MHz	$ 1,798
PENTIUM 66 MHz	$ 1,638
PENTIUM 60MHz	$ 1,618

- PENTIUM PCI LOCAL BUS M/B
- INTEL PENTIUM CPU w/ZIF SOCKET
- 256 CACHE MEMORY
- 8MB RAM 70NS (EXP TO 128MB)
- CPU COOLING FAN & HEATSINK
- 1.2 MB & 1.44 MB FDD
- 540MB IDE HARD DRIVE
- PCI ENHANCED IDE CONTROLLER
- 2 SERIAL, 1 PARALLEL, 1 GAME
- PCI ULTRA PRO SVGA w/ 1MB (UP TO 2MB)
- 15" SVGA MTR 1280 x 1024 .28D.P. N-I
- DELUXE MID TOWER CASE
- 101 KEY ENHANCED KEYBOARD
- 3-BUTTON HI-RESOLUTION MOUSE

* MULTI-MEDIA UPGRADE:

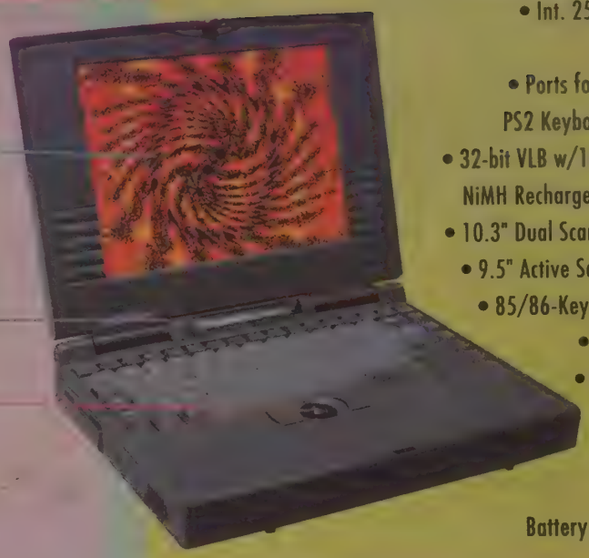
- MULTI-MEDIA KIT-DUAL SPEED SONY / ACER/ PANASONIC CD ROM 16 BIT SOUND BLASTER COMPATIBLE SOUND CARD ADD $168
- NEW! MULTI-MEDIA KIT-TOSHIBA 3501B 195MS QUAD SPEED CD ROM • SOUND BLASTER 16 SCSI II SOUND CARD ADD $388
- MULTI-MEDIA KIT-NEC TRI SPEED 510 195MS CD ROM • SOUND BLASTER 16 SCSI II SOUND CARD ADD $338
- NEW! MULTI-MEDIA KIT-TEAC SUPER QUAD (4X) CD ROM • SOUND BLASTER 16 BIT SOUND CARD ADD $288

PRINTERS & MONITORS

•HEWLETT PACKARD	
HP DESK 540	$290
HP DESKJET 560C	$465
HP OFFICE JET	$725
HP LASERJET 4L/4ML	$6[illegible]
HP LASERJET 4P/4M	$[illegible]
HP LASERJET 4 PLUS	$1,[illegible]
HP SCANNER II P/ IIIP	CALL
HP SCANNER II CX	$915
•CANON:	
CANON BJ-200E	$235
CANON BJ-600E / BJ-4000	$475 / $415
CANON BJ-10SX	CALL
•EPSON:	
EPSON AP- 2250 / 5000+	$110 $240
EPSON STYLUS COLOR	$[illegible]
EPSON AL-1100 /1400	$[illegible]
EPSON ACTION-1500	$[illegible]
EPSON ACTION-1600	$[illegible]
•PANASONIC	
KX-P2130 / KX-P2135	$205/$240
KX-P3123 / SP-100	$[illegible]
KX-4400/4410	$[illegible]
•TEXAS INSTRUMENT-COLOR INK	$[illegible]
•SHARP JX-9400	CALL
•CITIZEN COLOR II PRINTER	$[illegible]
•VIEWSONIC / MAG MONITOR	$[illegible]
•NEC-3FGE / 4 FGE MONITOR	$[illegible]
•SONY 15" FS MONITOR	$[illegible]

TERMS:
- 30-DAY MONEY BACK GUARANTEE W/10% RESTOCKING FEE.
- ALL PRICES ARE C.O.D. CASH.
- PRICE & CONFIGURATION SUBJECT TO CHANGE WITHOUT NOTICE.
- ALL RETURNS MUST BE AS-NEW AND SEND PREPAID, WITH RMA NUMBER.
- WE ACCEPT VISA, MC & AX.
- ADD SALES TAX NO EXCEPTION.
- ONE YEAR WARRANTY ON PARTS.
- THREE YEARS FREE LABOR WARRANTY.

SOUNDX LOCAL BUS PCMCIA
MULTI-MEDIA NOTEBOOK



10.3" DUAL SCAN 640X480 WITH LOCAL BUS & WINDOW ACCELERATOR SIMULTANEOUS DISPLAY

LED INDICATOR:
- Battery in use/Charging
- AC, DC and Low Battery Status
- HDD, FDD in use
- Caps Lock, Numbers Lock Scroll Lock
- PCMCIA in use

16MM CENTER MICRO TRACK BALL

CHOICE OF TWO TYPE II OR ONE TYPE III PCMCIA SOCKET:
- Fax/Modem
- Network Adapter
- SCSI Card
- Hard Disk
- Memory Card

- SL Enhanced 486DX-33, DX2-50/60, DX4-75/100
- 4MB RAM, Easy Expand up to 20MB
- 128KB Bios Flash ROM
- 16mm Center Micro Trackball Mouse Built-in
- Int. 250MB Hard Disk (340/520MB)
- 3.5" 1.44MB Floppy Drive
- Ports for 1S, 1P (Bi-Directional), VGA, PS2 Keyboard, Audio Jack, Earphone out
- 32-bit VLB w/1MB VRAM Windows Accelerator
- NiMH Rechargeable up to 4.5hr Quick-Charge
- 10.3" Dual Scan DSTN 640x486 Simultaneous
- 9.5" Active Scan TST 640x486 Simultaneous
- 85/86-Key PC/AT w/12 Function Keys KB
- PCMCIA 2 Type II or 1 Type III
- Size: 10.9"W x 8.58"Dx1.75"H
- Weight: 6.3lbs
- Accessories for: Doching Station, External Battery Charger, Automobile Car Cable

CCS DUAL SCAN

486SX-33 4MB/260MB HDD	$1799
486DX2-66 8MB/340MB HDD	$2235
486DX4-100 8MB/340MB HDD	$2599

CCS ACTIVE MATRIX

486SX-33 4MB/260MB HDD	$2639
486DX2-66 8MB/340MB HDD	$3135
486DX4-100 8MB/340MB HDD	$3499

PENTIUM DUAL SCAN

P-90 8MB/340MB HDD	$3629

PENTIUM ACTIVE MATRIX

P-90 8MB/540MB HDD	$5252

RCD-1000™ RECORDABLE CD SYSTEM

Pinnacle introduces its next generation recordable CD storage system, the RCD-1000™, for both Macintosh and Windows-based computers.

The RCD-1000™ is the most affordable, half-height recordable compact disc system that allows users to easily create audio, video or data compact discs within minutes.

The new RCD-1000™ offers two new features, a built-in 1 MB cache buffer and a double-speed write for faster recording of custom CDs. The RCD system can be used as a random access backup and archival medium to replace tape storage. The discs can also be used as a master for data duplication or for low-cost data distribution. The RCD can create ISO 9660, HSF, CD-Image, or audio format discs that can be played on most standard CD-ROM players. Each disc holds 680 Megabytes of information or 74 minutes of audio.

Warranty: Pinnacle Micro provides a one year warranty on all parts and labor.

$2300

COMPULINK AUTHORIZED RESELLER

IBM Business Partner

DigiBoard

COMPAQ AUTHORIZED RESELLER

BusLogic

AUTHORIZED RESELLER DPT

IBM Personal Printers by LEXMARK™

NANAO Authorized Dealer Distributed by CADLAX MICRO

MICROSOFT WINDOWS READY TO RUN

PLATINUM II CERTIFIED

yes It runs with NetWare

TERMS
- 14-Days money back guarantee
- All prices are C.O.D. cash
- Prices & configuration subject to change without notice.
- All returns must be as-new and send prepaid with RMA number
- One year warranty on parts
- Two years free labor warranty

CCS BEST BUY
486DX2-66Mhz

1

512K Cache
4MB RAM
1.44MB Floppy Drive
VESA 32-bit IDE Controller
420MB IDE Hard Drive
Medium Tower Case
14" N-I SVGA Monitor (1024x768)
32-bit CIRRUS LOGIC 5428 SVGA (1MB)
101 Enhanced Key Board, Serial Mouse

$959

CCS
SUPER MULTI-MEDIA VLB MASTERING SLOTS

2

486DX2-66Mhz
512K Cache
8MB RAM/420MB HD
15" Digital Control SVGA Monitor
(1280x1024, .28dpi) N-I
TEAC 1.44MB FD
VESA IDE FD/HD Controller
VESA SVGA Card w/1MB up to 2MB
101 Keyboard/3-Button Mouse
Mid-Tower Case
Double Speed CD-ROM
Sound Blaster MCD
Compatible Sound Card
80W Speakers 14 CD-titles

$1399

CCS
PENTIUM 90MHz INTEL NEPTUNE CHIPSET

3

Pentium Neptune Chipset
Intel CPU, 256K Cache
8MB RAM, 540MB IDE HD
1.44MB Floppy Drive
PCI High-Speed I/O
Medium Tower Case
15" Digital Control SVGA N-I Mtr.
ATI MACH 64 PCI w/2MB
101 Enhanced Key Board
Serial Mouse

$1899

MULTI-MEDIA UPGRADES

CCS PACKAGE #1
DOUBLE SPEED MULTI MEDIA

- Sony Double Speed CD-ROM
- Sound Blaster MCD Compatible Sound Card
- 80W Speakers
- 14 CD Software Titles

...$230

CCS PACKAGE #2
QUAD SPEED MULTI MEDIA

- Teac Quad Spin CD-ROM
- Sound Blaster MCD
- 112W Stereo Speakers
- 14 CD Software Titles

...$389

TOSHIBA
QUAD SPIN SCSI-II

...$499

VISA

Computer Technology CCS 1987-1994

Corporate Computer Solutions

9698 Telstar Ave., #303,
El Monte, CA 91731
818-582-8013 Fax 818-582-8921

CCS
PENTIUM 90MHz SUPER STATION

4

Pentium PCI Motherboard
Intel CPU, 512K Cache
16MB RAM, 1.05GB SCSI-II HD
1.2 & 1.44MB Floppy Drive
PCI SCSI Controller
Medium Tower Case
ATI MACH 64 PCI w/2MB
17" ACER SVGA N-I Monitor
(1280x1024, 0.28dpi)
101 Enhanced Key Board
Serial Mouse

$2799

IT COMPUTER

8 YEAR CELEBRATION!

- WE NEVER CLOSE
- OPEN 7 DAYS A WEEK
- WE HAVE BRAND NAMES & BEST PRICE

(Corner Harbor & Heil) 16540 Harbor Blvd., Suite #6,
Fountain Valley, CA 92708
Tel: (714) 775-8126 Fax: (714) 775-0679
Customer Service: (714) 775-0648

intel inside **HOT SAVINGS!** pentium

486DX2/66MHz
Intel CPU, 256K Cache
Mid Tower Case
4MB RAM
1.44 TEAC
540MB Hard Drive
VL/IDE 2S/P/G Port
VL/VGA Card
14" .28 N.I. VGA Monitor
101 Enhanced Keyboard
High Res. Mouse
$995

PENTIUM 90MHz
Intel CPU 256K Cache
Mid Tower Case
4MB RAM
1.44 TEAC
540MB Hard Drive
PCI/IDE 2S/P/G Port
PCI/VGA 1MB
14" .28 N.I. VGA Monitor
101 Enhanced Keyboard
High Res. Mouse
$1695

UPGRADE:
14.4 Fax & Modem '69
Multimedia Kits '219
Memory 4MB '139

CASE/POWER SUPPLY
Compact Mid Case ..... '42
Mid Tower Case ..... '53
Desktop Case ..... '41
Motherboard & CPU
486SLC/66MHz ..... '63
486SLC/VL/66MHz IBM ..... '159
486DX2-66MHz Intel ..... '285
Pentium 66MHz ..... '665
Pentium 90MHz ..... '855

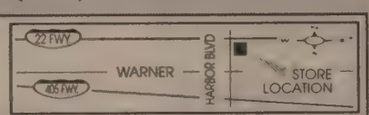
CONTROLLER/VIDEO
IDE & I/O ..... '11
VL/IDE & I/O ..... '18
SCSI II Future Domain ..... '128
PCI/IDE ..... '29
Trident VL Bus 1MB ..... '65
Trident PCI 1MB ..... '85
Diamond Stealth 2MB ..... '195
S3 VL Bus ..... '72
VL Bus SCSI ..... '149

HD/FD DRIVES
TEAC 1.2 ..... '39
TEAC 1.44 ..... '31
Safronic 1.44 ..... '28
365MB Quantum ..... '165
540MB Quantum ..... '229
560MB Samsung ..... '209
730MB ..... '289
1.08GB Quantum ..... '475
Colorado/Tracker ..... '279

CD ROM
DOUBLE
Panasonic ..... '139
Sony ..... '119
NEC SCSI ..... '149
TRIPLE
NEC 510 3x ..... '249
QUAD
TEAC 4x ..... '289
Toshiba 3501 ..... '389

BAREBONE SYSTEMS
Mid Tower/IDE Ctrl./1.44 FD/Keyboard
486SLC/33MHz '175
486SLC/66MHz (IBM) '270
486DX2/66MHz (Intel) '385

16540 Harbor Blvd.,
Suite G
Foutain Valley, CA
92708



MONITOR REPAIR
VGA $65 - PARTS & LABOR
(714)775-0648

Resources

BULLETIN BOARDS cont.

3336. 8-N-1, 24 hrs., 14,400. Writers, readers, artists, the coffeehouse culture. Sysop: Joseph Valentinetti. [Exp. #133.]

CompuShopping Net. (909)464-2750. 24 hrs., 2400–14,400. Lowest price CD-ROM titles sale, free download CD catalog with PCX picture. [Exp. #134.]

The Dark Tower. (909)598-0036. 8-N-1; 24 hrs., 1200–28,800. Nine CD-ROM drives, huge adult section, Usenets, free Internet email. [Exp. #134.]

Data Connection. (909)698-7257. 8-N-1, 24 hrs., 28,800. Eight lines. News, weather, Planet Connect feeds, 12 CDs, adult. Fee. Sysop: Dennis J. Clark. [Exp. #134.]

Dragon's Lair BBS. (909)794-4340. 8-N-1, 24 hrs., 1200–14,400. CD-ROM, large file base, FidoNet, WWIVnet, ICEnet, many echoes, msg. bases. Free access. Sysop: Hawkeye. [Exp. #134.]

electronic Gourmet Guide (eGG). (909)338-5422. 8-N-1, 24 hrs., up to 28,800. The eGG is an online food magazine and chef's resource center. Guests free. Sysop: T. Way and K. Heyhoe. [Exp. #134.]

The Empire BBS: The Next Generation. (909)946-1448. 8-N-1, 24 hrs., 300–14,400. Multiline chat, all welcome, matchmaker, flower shop, files. From $2.50/month. Sysop: Tigana and Emperor. [Exp. #135.]

The French Connection BBS. (909)428-7648. 24 hrs. Eight lines. California's largest adults only BBS. View GIFs online in Windows. Sysop: Christopher A. Moss. [Exp. #133.]

Inland Sports BBS. (909)789-2978. 8-N-1, 24 hrs., 1200–28,800. Sports conferences, many echoes, CD-ROM, 10,000+ files. Free access. [Exp. #134.]

Legend Graphics Online. (909)689-9229. 24 hrs. 16 lines. Super VGA photo images, MoviePICs, huge adults-only file areas. [Exp. #134.]

NightVision. (909)369-6556. 8-N-1, 24 hrs., 14,400. 16 lines. Totally adult, amateur GIFs, email, adult GIFs/text files, more. Fee. [Exp. #133.]

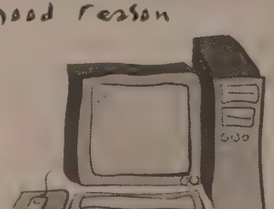
Pleasure Dome BBS. (909)628-7154. 24 hrs., 2400–14,400. True Windows GUI, multitasking, #1 adult BBS, 8GB+. Sysop: Kristopher M. Morales. [Exp. #134.]

Spectrum Online Services. (909)396-9117. 24 hrs., 9600. Eight lines. Interactive online games featuring Doom, chat, CD-ROM library, email, forums. [Exp. #134.]

HOUSE OF SEX MOOD @ ADULT.COM
DOWNLOAD THE ONLY ADULT DOOMWAD OFFERED
DIAL 310.838.0542 logon:guest password:new
or call 310.410.1846 for a catalog
FREE DIAL UP ACCOUNTS - FREE SLIP ACCOUNTS - AN ARCHIVE SITE
FULL INTERNET ACCESS - E-MAIL-TELNET-FTP - WITH CD-ROM'S
Free Internet Service Today
OVER 10,000 GIFS
ADULTCOM WITH PURCHASE OF VIDEO - WE FEATURE - ALSO USENET NEWS GROUPS - ALL ALT.SEX & ALL WWW - RUN MOSAIC FROM HOME OR AN ISDN LINE - PURCHASE

ECN Entertainment & Consumers Network
Full Internet Access (Incl. Telnet, FTP, Gopher, WWW)
National Chat Services
Live & Multi-player Games
Business Services/News Wires
Adults Only After 9pm
Subscriptions start at $10 per month
Full Internet Access Included
Public & Private Chat Areas
Dating & Matchup Features
2500+ Pubs & Forums
Large File Library
All 14.4 Modems (300 to 14.4)
FREE TRIAL!
Internet Access Telnet ecn.ecn.com
(310) 324-5570 Long Beach
(818) 888-3942 Simi-Westlake
(818) 760-3828 E. SFV
(310) 204-6006 (Voice)
(310) 204-6007 West LA/LA
(818) 784-3039 W. SFV
(818) 249-3989 La Crescenta
The Game Connection!

finally, a good reason to use the computer.



- 16 lines
- 1200 - 14.4k bps (all lines)
- Sizzling public and private live chat out there - meet people to party with!
- 7 fast CD-ROM drives online, both Adult and Public Domain software
- Public & private message bases for fast correspondence
- running TBBS software
- Public and Private message areas
- Online Browsing of user profiles
- Huge collection of non-CD files (countless adult GIF pictures)
- See classified ads from this magazine before they're published!
- Several reasonable membership rates
- Now available in Southern CA!

pathway bbs
get into the swing of things
northern california 408.956.5600 Fremont, Newark area - 510 790 3127
southern california (new!) 714.236.4247
ANY ADULTS ONLY Free Sample Files
Voice Info 408.956.5650
(membership rates can be found online)

GARLIQUE GRAPHICS
WORLD FAMOUS GIF'S
ADULT CD'S
FREE CATALOGS
SUBSCRIBE ON-LINE
408-847-0665

Nitelog 33 Nodes
56,000 Files
BBS
Fidonet / Internet Email
Usenet / Rima / ILink Email
DOS / WINDOWS / NT
OS2 / UNIX / MAC
& ADULT FILES
(408) 655-1096
28.8k Lines Available too!

You're traveling aimlessly down the Information Superhighway, lost in CyberSpace without a map. You're frustrated with the "meat-market" scene and bored with unfriendly BBS's.

There is a REST STOP up ahead...

the ANNEX!®

Telnet: 204.74.67.1 PPS: .ANNEX

INTERNET: Including Telnet, FTP & MORE!

98 Incoming Lines covering ALL of Southern California, Social Events & Parties, Active Chat, Daily On-Line NEWS, GIGS of Shareware Files, On-Line DOOM & other Multi-Player Games, our convenient VOICE SUPPORT Line, the Friendliest Callers & MORE!

Your Rest-Stop on the Information SuperHighway

(818)779-5600 via MODEM (8N1)

FREE TRIAL!

Call 1~800~GO~ANNEX
For A Local # Near You!

USER GROUPS

ACCESS

Access Developers Group. Meetings: 3rd Tues., 6:15 pm, Microsoft Orange County Office, 3 Park Plaza, Ste. 1800, Irvine (Jamboree at Main, next to Hyatt Regency). Meetings include formal presentations, tips and tricks, and Q&A sessions. Call: Michie Kobayashi, (714)770-0400, ex. 2217. [Exp. #134.]

AMIGA

Amiga Users Group Of Long Beach. Meetings: 1st Thurs., 7:00 pm, Fire Station Bldg., 5373 E. Second St., Belmont Shores. All persons with an interest in the Amiga computer welcome. Free. [Exp. #137.]

APPLE

Champions Of The Mac Proletariat (CHOMP). Meetings: monthly, 7:00 pm, Cal Poly Pomona. Question and answer, raffle of useful software, opportunity to purchase disks. Call: Craig Richards, (909)985-7385 or Mitch Cohen, (909)598-5766. [Exp. #137.]

Original Apple Corps. Meetings: 2nd Sun., West LA area. Apple II and Mac users group. Support for beginners through experts. Call: Fred Duffy, (310)450-3336. [Exp. #138.]

ATARI

All Computer Association Of Orange County. Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

ATESIG—Atari 8-Bit SIG. Meetings: 145 Surf Pl., Seal Beach. Cooperative user group for model railroad applications. Call: (310)430-5433. [Exp. #134.]

South Bay All Computer Enthusiasts. Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

COMMODORE

Commodore Helpers of Long Beach. Meetings: 2nd Sat., 9:00 am., Community Presbyterian Church, 6380 Orange Ave., Long Beach. Call: Bill Davies, (310)599-1913. [Exp. #133.]

Commodore Technical Users Group (C=TUG). Meetings: 4th Sunday, 1:00 pm, Senior Citizen Center, 170 S. Olive Rd., Orange. Public domain library, documents library, and magazine. Software and hardware help. Call: Lou Palush, (714)532-1802. [Exp. #133.]

Orange County Commodore Club. Meetings: 4th Sat., 11:00 am, Costa Mesa Public Library, 1855 Park Ave., Costa Mesa. Call: Mike Moore, (714)668-9715. [Exp. #133.]

San Fernando Valley Commodore 64/128 Users Group. Meetings: 1st Tues., 7:00 pm, Balboa Park Recreation Center, Rm. 2, Balboa and Burbank blvds., Encino. Call: Paul Kroll, (818)892-3859. [Exp. #137.]

Southern California Commodore Users Group. Meetings: 3rd Tue., 7:00 pm, Nazarene Christian School, Rm. 18, 15000 Studebaker Ave., Norwalk. Call: Bill Davies, (310)599-1913. [Exp. #133.]

DESKTOP PUBLISHING

Desktop Publishing Support Group And Network Social. Meetings: 1st Mon., 7:00 pm, Covina. Hosted by Planet Data Service Company. $1 w/RSVP, $2 at door. Call: Diane M. Silvers, (818)332-0329. [Exp. #137.]

FINALE

Finale User Group (FUGUE). Meetings: 4th Wed., 7:30 pm, Electronic Music Box, 14947 Ventura Blvd., Sherman Oaks. Tips and problem solving. Bring files on disk. SIG of LAMG. Call: Bonnie Janofsky, (213)658-5997. [Exp. #133.]

IBM & COMPATIBLES

All Computer Association Of Orange County. Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

Cedar Village Users Group. Meetings: 2nd Sun. (3rd if 2nd is holiday), 3:00 pm, Speakers, software, BBS, and more. Contact: Tony Barnes, P.O. Box 1141, Bloomington, CA 92316, or modem (909)356-1269. [Exp. #133.]

Fresno PC Users Group. Meetings: 1st Mon., 7:30 pm, Ramada Inn, Conference Room A, 324 E. Shaw Ave., Fresno. Call: (209)496-3974. [Exp. #134.]

Greater South Bay PC User Group. Meetings: 2nd Thurs., 7:30 pm, Torrance Recreation Center located behind the main city library, Torrance. Visitors welcome. Call: (310)335-2799. [Exp. #137.]

MicroLink PC Users Group. Meetings: 1st Sat., 6:00 pm, La Habra Sr. Center, 165 E. La Habra Blvd., La Habra. Friendly group committed to helping people of all skill levels. Call: (714)491-6069. [Exp. #137.]

NOCCC (North Orange County Computer Club). Meetings: 1st Sun. Computer-oriented meetings, SIGs, newsletter, raffles, and BBS. Call: (714)998-8080. [Exp. #137.]

Pasadena IBM Users Group. Meetings: 3rd Wed., 7:00 pm, 2184 N. Lake Ave., Altadena. Speakers on hardware/software, demonstrations, SIGs, library, newsletter, and BBS. Call: Steve Bass, (818)791-1300. [Exp. #138.]

SCV PC Group. Meetings: 2nd Wed., 7:00 pm, Valencia Town Center Community Room. Call: (805)298-1680. [Exp. #137.]

South Bay All Computer Enthusiasts. Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

Thousand Oaks Personal Computer Club (TOPCC). Meetings: 4th Thurs., 6:30 pm, Goebel Senior Adult Center, 1385 E. Janss Rd., Thousand Oaks. Call: (805)494-8675. [Exp. #138.]

Valley Computer Club. Meetings: 1st Wed., 7:00 pm, Burbank Board of Realtors Bldg., 2006 W. Magnolia, Burbank. BBS, PD library, SIGs, newsletter. All welcome. Fee, $4. Call: Estella McClintock, (818)848-1948 or Grayce Hruda, (818)842-3707. [Exp. #133.]

Valley IBM Compatible Users Group (VICUG). Meetings: 3rd Fri., 7:00 pm, State Bldg., 6150 Van Nuys Blvd., Van Nuys. Call: Harry Tischler, (818)997-1470. [Exp. #133.]

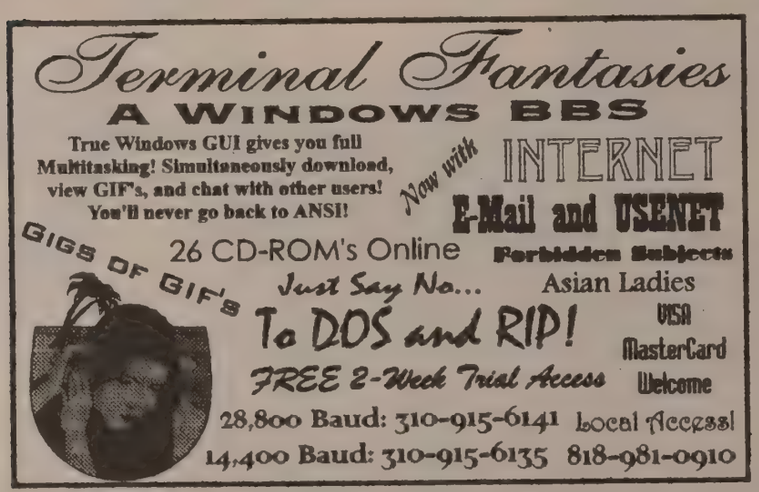
KAYPRO

KAYOS Kaypro User Group. Meetings: 4th Mon. of even months, 6:00 pm, El Segundo Library, Mariposa and Richmond streets. Call: (310)379-8339. [Exp. #137.]

MACINTOSH

All Computer Association Of Orange County. Meetings: 2nd Sun., 1:00 pm, Fullerton Savings, 12860 Euclid Ave., Garden Grove. Supporting Atari, Macintosh, PC, and other computer systems. Call: (714)265-9357. [Exp. #134.]

Champions Of The Mac



Is Your Listing Missing?

Free user group and association listings are limited to the group's name, meeting information, contact name and phone number, and a ten-word description. They will be **deleted at six-month intervals** to ensure timeliness and accuracy of information.

Free BBS listings are limited to the board's name, phone number, hours, baud rates, parameters, and a ten-word description. Please let our readers know if your BBS is free or requires a fee. Because we have an ongoing problem of boards shutting down without telling us, much to the annoyance of would-be callers and the new phone number's owner alike, we will **delete these listings after they've run three months.** The notice at the end of the listing—Exp. #xxx—refers to the last issue number it will appear in unless renewed.

You can update or renew your listings at any time. If yours is missing, send your listing information to: US Mail should go to: MicroTimes User Groups, 3470 Buskirk Ave., Pleasant Hill, CA 94523. **Faxes** are welcome at (510)934-3958. **Email** can be sent to: microx@well.sf.ca.us, or MCI:MICROTIMES.

ADULT MODEM FUN
EASY STREET
FULL INTERNET SERVICE
• Never Busy 42 Lines
• 16 Gigs of Files
• The Lounge
• 40 Online Games
CHAT • INTERNET
FILES • GAMES • NEWS
Internet • E-Mail • Shell Access • Telnet • FTP • IRC • WWW
• Disk Space • Read News • Finger and More...
Voice 909-590-5734
Placentia 714-528-3771 Chino 909-590-4307
Anaheim 714-778-5473 Cypress 714-229-9859

Resources

USER GROUPS cont.

Proletariat (CHOMP). Meetings: Thurs. monthly, 7:00 pm, Cal Poly Pomona, grey building near administration building, rm. P2-7. Call: Craig Richards (909)985-7385 or Mitch Cohen, (909)598-5766. [Exp. #137.]

Original Apple Corps. Meetings: 2nd Sun., West LA area. Apple II and Mac user group. Support for beginners through experts. Call: Fred Duffy, (310)450-3336. [Exp. #138.]

South Bay All Computer Enthusiasts. Meetings: 2nd Tues., 7:30 pm, VFW Hall, 1865 Lomita Blvd., Lomita (1 block W of Western). All skill levels. Call: Danny or Mary, (310)834-0040. [Exp. #137.]

South Bay Apple Mac User Group. Meetings: Last Wed., 8:00 pm, El Camino College, MCSC Rm. 100, 16007 Crenshaw Blvd., Torrance. Newsletter, PD library, demos, and raffles. Call: (310)644-3315. [Exp. #137.]

West Orange County Macintosh User Group (WOCMUG). Meetings: last Tues., 7:00 pm, Emerson Elementary School, 2625 Josie, Long Beach (NE corner of Palo Verde and Willow, just north of 405 fwy at Palo Verde). Come and join with other Mac Users to share knowledge and experiences. Call: Lynn Goodrich (714)892-8910 or Tony Muller (310)493-1240. [Exp. #134.]

MUSIC

Club Mid. Meetings: 1st Tues., 7:00 pm get acquainted, 7:30 pm meeting, 12282 Loraleen, Garden Grove. Discuss all aspects of MIDI, music, and computers. Call: Art, (714)539-3808. [Exp. #138.]

NETWORKING

Los Angeles NetWare Users Group (LANet). Meetings: 4th Tues., 6:30 pm, Novell, 11300 W. Olympic Blvd. at Sawtelle, 9th Floor, West LA. Vendor presentations and open forum. Call: SCNUA, 1-800-532-7268. [Exp. #137.]

Orange County Magic Users Group. Meetings: last Wed., 7:00 pm. For users of Magic client/server tools. Call: Richard Grimm, (714)637-7718. [Exp. #137.]

POWERBUILDER

Los Angeles PowerBuilder User Group. Meetings: 1st Tues., 6:00 pm, Sony Entertainment, 3400 Riverside Dr., Burbank. [Exp. #133.]

PROGRAMMING LANGUAGES

The Software Toolsmiths. Meetings: Last Sat., 10:00 am, Joslyn Center, 339 Sheldon St., El Segundo (except Nov. and Dec.). Discussions and tutorials on programming: C++, Forth, J, Smalltalk, algorithms, etc. Neophytes welcome. Call: John LuValle, (818)797-1820, or Howard Rogers, (310)532-3342. [Exp. #133.]

ASSOCIATIONS

International Interactive Communication Society. Meetings: 2nd Mon. Virtual reality, multimedia, info highway issues, and more. Call: (310)313-5664. [Exp. #133.]

Planet Data Service Company's Desktop Publisher's Association. Meetings: 1st Mon., 7:00 pm, Covina. Support group and networking for those in DTP fields. Newsletter, referrals, and more. $50/yr. Call: (818)332-0329. [Exp. #137.]

Software Council Of Southern California. Meetings: usually 4th Wed., 6:00 pm, Long Beach Marriot, Main Ballroom, 4700 Airport Plaza Dr.; also breakfasts and luncheons around SoCal. A nonprofit trade association of software development organizations and companies providing support and services to the local software industry. Call: Bill Manassero, (310)328-0043. [Exp. #138.]

$15.00 A Month
KAIWAN INTERNET
Unlimited Access with no per hour charge!
Local call to Southern California!
Why pay toll calls?
KMENU Friendly User Interface for UNIX ignorant!
You don't even need to know UNIX!
KAIWAN offers full Internet Services including:
E-Mail, Shell Access, Telnet, FTP, Rlogin, Finger, Read News, Disk Space, 16.8K/14.4K Super High Speed Modems for dial-in, U/X/Y/Zmodem, Kermit, IRC, POP3, UQWK, MUDs, MUSE, TinTin, TF, Gopher, WWW, LYNX, WAIS, Yarn, Soup...
KAIWAN also offers UUCP, Domain Name Service, WWW Home Page, E-Mail Forwarding, Dial-in and Leased line SLIP/PPP connections and other Lan connections.
How to reach KAIWAN?
Phone: 714/638-2139 (Voice) 714/638-0455 (Fax)
Internet: Telnet KAIWAN.COM (Login as guest)
Anonymous FTP KAIWAN.COM:pub/KAIWAN
E-Mail info @ KAIWAN.COM
Finger root @ KAIWAN.COM
Modem Dial-in: 714/638-4133 (North Orange County, Long Beach/Alamitos)
714/524-5545 (Chino, Diamond Bar, La Puente)
714/951-3679 (South Orange County, San Clemente)
909/785-9712 (Corona, Arlington, Riverside, Moreno Valley)
310/527-4279 (Los Angeles, South Bay, Long Beach)
818/579-5103 (Pasadena, San Gabriel Valley, Covina)
818/756-0180 (San Fernando Valley, Santa Monica, W.LA)
818/592-6673 (Malibu, Agoura, Simi Valley)
805/294-9338 (Valencia, Canyon Country, Newhall)

NOVA SOFTWARE
ON SALE THIS MONTH!!!
PC Tools 8.0 ..... $40
X-Tree for Win..... $39
Photofinish 2.0 ..... $45
Family Bible CdRom $29
Borland C+ +4.0 ..... $150
Generic Cadd 6.1..... $99
Virtual Reality Studio $25
Mac Tools 2.0 ..... $39
Borland Pascal 7.0..... $75
Borland C+ +3.1 ..... $99
20 DOLLAR BLOWOUT
Family Reunion • Privateer • Protostar • Blue Force
• Qemm 6.01 • Mantis CdRom • KeyFonts • More Lemmings
• CyberRace • C.P. AntiVirus • Mavis Teaches Typing • Labels!
• F-15 Strike III • Terminator 2029 • Jump Jet
LOTS LOTS MORE!!!
10% OFF any Purchase with this ad
$15 and $5 Software Titles too!
Prices include coupon discount.
LARGE SELECTION OF MAC TITLES
3537 Torrance Blvd., Torrance, CA • (310)543-0053
1 BLOCK EAST OF HAWTHORNE OPEN DAILY NOON - 7PM
Call for Best Pricing
We Ship UPS
Master Card/Visa
Discover/American Express
Dealer Inquiries Welcome!
DISCOVER VISA MasterCard AMERICAN EXPRESS
N 405 Fwy. Hawthorne Blvd. NOVA Crenshaw Blvd. 110 Fwy. Torrance Blvd.
Nova Software 310•543-0053
We Will Beat Any Price on Any In Stock Item

FREE! INTERNET ACCESS
On-Line Time for New Users
Give Us a Try!
Call NOW! (Via Modem) 310.421.6165 714.454.9242
For numbers listed below:
At connect type: "..." hit <enter>, type "PRISM"
213.687.4902 818.564.8334
310.513.6447 818.884.2524
805.265.1943 909.350.1482
805.641.1122 909.789.1412
Call for Full List of LOCAL Numbers
✓Best Price, more services
✓ALL high speed to 28,800
✓4.5 gigabytes of files
✓Multi-Player Games
✓Parties & Social Events
✓Group & Private Chat
✓Adult Areas
✓FREE Unlimited E-Mail
✓Matchmaker & More!
PRISM B.B.S. 18 & OVER
LOCAL CALL TO ALL OF SOUTHERN CALIFORNIA

Eden BBS
The Electronic Garden
Games • Chat • E-Mail • Forums • Friends
Fun • 32 Lines • Internet • MajorRet
Southern California's hottest Adult BBS!
FREE 15 Day No Risk Trial!
714-548-1900 • 714-530-6335 • 714-528-7226 • 714-472-9456
310-421-2420 • 310-352-4199 • 310-838-1707 • 909-279-2600

9.1GB SCSI-2 MICROPOLIS MC 1991

- 9.09GB Super-Capacity Fast SCSI-2 !
- Enhanced Features for Improved Performance !
- Fast Average Seek Time of 12ms !
- 512KB Cache Buffer, 5400RPM !
- Five Year Full Factory Warranty !
- WHILE SUPPLIES LAST !

$3199

INTRODUCING THE ALL NEW RECORDABLE CD-ROM DRIVES

NEW! NEW!

ANEASYTOUSECDRECORDER/ PLAYERTHATSTORESUP TO 650MBOFDATA. RECORDABLE CD SYSTEM
MAKE YOUR OWN DATA, AUDIO & VIDEO CDs ! PC & MAC BACKUP SOFTWARE FOR A RELIABLE BACKUP SOLUTION !

HARD DRIVES

Quantum

2.5" IDE & SCSI NOTEBOOK DRIVES

256MB	DY256AT	17ms	2.5"	IDE	$269
514MB	DY514AT	17ms	2.5"	IDE	$449
256MB	DY256S	17ms	2.5	SCSI	$279
514MB	DY514S	17ms	2.5"	SCSI	$499

MAVERICK IDE & SCSI-2 SERIES

540MB IDE	QM30540MVA	14ms	3.5"x1"	$225
540MB SCSI	QM30540MVS	14ms	3.5"x1"	$228

LIGHTNING IDE & SCSI-2 SERIES

365MB IDE	QM30365LTA	11ms	3.5"x1"	$179
540MB IDE	QM30540LTA	11ms	3.5"x1"	$235
730MB IDE	QM30730LTA	11ms	3.5"x1"	$269
365MB SCSI	QM30365LTS	11ms	3.5"x1"	$179
540MB SCSI	QM30540LTS	11ms	3.5"x1"	$239
730MB SCSI	QM30730LTS	11ms	3.5"x1"	$279

ProDrive IDE & SCSI-2 SERIES

				Internal	External
540MB	LPS540AT	12ms	3.5"x1"	$279	N/A
540MB	LPS540S	12ms	3.5"x1"	$299	$399

EMPIRE FAST SCSI-2 SERIES

				Internal	External
1.0GB	EMP1080S	9.5ms	3.5"x1"	$539	$639
1.4GB	EMP1400S	8.9ms	3.5"x1"	$729	$839
2.1GB	EMP2100S	8.9ms	3.5"	$899	$999

Maxtor

IDE & ENHANCED IDE DRIVES

420MB	7420AV	12ms	3.5"x1"	$185
540MB	7540AV	12ms	3.5"x1"	$229
540MB	MXT540A	8.5ms	3.5"x1"	$Call
546MB	7546A	12ms	3.5"x1"	$239
850MB	**7850A**	**12ms**	**3.5"x1"**	**$345**
1.2GB	**71260A**	**<12ms**	**3.5"x1"**	**$499**

CONNER *The Storage Answer*

IDE & ENHANCED IDE DRIVES

420MB	CFS420A	14ms	3.5"x1"	$179
540MB	CFA540A	12ms	3.5"x1"	$229
850MB	CFA850A	<12ms	3.5"x1"	$275
127GB	CFA1275A	12ms	3.5"x1"	$419

FAST SCSI-2 DRIVES

				Internal	External
1.0GB	CFP1060S	<12ms	3.5"x1"	$489	$599
2.1GB	CFP2105S	<9ms	**5400RPM**	$925	$1029
2.1GB	CFP2107S	<9ms	**7200RPM**	$1065	$1169
4.2GB	CFP4207S	<9ms	**7200RPM**	$2139	$2249

WESTERN DIGITAL *IDE & ENHANCED IDE DRIVES*

420MB	WDAC2420	13ms	3.5"x1"	$188
540MB	WDAC2540	12ms	3.5"x1"	$229
730MB	WDAC2700	10ms	3.5"x1"	$275
850MB	WDAC2850	<10ms	3.5"x1"	$309
1.0GB	WDAC31000	<10ms	3.5"x1"	$415
1.2GB	**WDAC1200**	**<10ms**	**3.5"x1"**	***NEW* ... $Call**

IBM

IDE DRIVES

364MB	70G8848	12ms	3.5"x1"	$199
527MB	70G8849	12ms	3.5"x1"	$245
728MB	70G8850	12ms	3.5"x1"	$299
1.0GB	94G3183	12ms	3.5"x1"	$459

FAST SCSI-2 DRIVES

				Internal	External
540MB	94G2646	12ms	3.5"x1"	$239	$339
728MB	94G2647	12ms	3.5"x1"	$329	$429
1.0GB	94G3184	10.5ms	3.5"x1"	$329	$629
2.0GB	**94G3054**	**7.5ms**	**7200RPM**	**$1229**	**$1329**
4.0GB	90F0780	9.4ms	5.25	$1999	$2259

FUJITSU

IDE PicoBird Series

530MB	M2684TAU	12ms	3.5"x1"	$209

SCSI-2 PicoBird Series

				Internal	External
530MB	M2684SAU	12ms	3.5"x1"	$225	$319
1.0GB	M2694ESA	9.5ms	3.5"	$499	$599

SCSI-2 Allegro Series

2.1GB	M2903S	9.6ms	3.5"	$CALL	$CALL
2.1GB	M2915S	8.9ms	3.5"	$CALL	$CALL
3.1GB	M2908S	9.6ms	3.5"	$CALL	$CALL

TOSHIBA
2.5" IDE NOTEBOOK DRIVES

262MB	MK1724FCV	13ms	128k cache	$239
352MB	MK1824FCV	13ms	128k cache	$279
528MB	MK2526FC	13ms	128k cache	$429
704MB	MK2528FC	13ms	128k cache	$569

HARD DRIVES

MICROPOLIS

IDE DRIVES

1.05GB	MC4110A	8.5ms IDE	3.5"x1"	$659
1.75GB	MC2217A	10ms	3.5"	$659

FAST SCSI-2 DRIVES

				Internal	External
1.0GB	MC4110	8.5ms	3.5"x1"	$599	$699
1.75GB	MC2217	10ms	3.5"	$899	$999
2.0GB	MC4221	8.5ms	3.5"x1"	$1059	$1169
3.0GB	**MC1936**	**13ms**	**5.25"**	**$1199**	**$1399**
4.0GB	MC3243	8.5ms	3.5"	$1999	$2099
9.1GB	MC1991	11ms	5.25"	$3199	$3399

AUDIO VISUAL SCSI-2 DRIVES

				Internal	External
1.0GB	MC4110AV	8.5ms	3.5"x1"	$759	$859
1.75GB	MC2217AV	10ms	3.5"	$1049	$1149
2.0GB	MC4221AV	8.5ms	3.5"x1"	$1209	$1299
3.0GB	MC1936AV	11ms	5.25"	$1349	$1549
4.0GB	MC3243AV	8.5ms	3.5"	$2199	$2299
9.1GB	MC1991AV	11ms	5.25"	$3599	$3799

Seagate

2.5"IDE NOTEBOOK DRIVES

209MB	ST9235AG	16ms	2.5"	$339
340MB	ST9385AG	16ms	2.5"	$469
540MB	ST9655AG	15ms	2.5"	$529

IDE & ENHANCED IDE DRIVES *FAST ATA-2*

341MB	ST3391A	13ms	**Fast ATA**	$228
428MB	ST3491A	14ms	**Fast ATA**	$248
545MB	**ST5660A**	12ms	**Fast ATA-2**	**$329**
850MB	**ST5850A**	11ms	**Fast ATA-2**	**$319**
1.0GB	**ST31220A**	14ms	**Fast ATA-2**	**$469**

FAST SCSI-2 DRIVES

				Internal	External
545MB	ST5660N	12ms	3.5"x1"	$349	$549
1.0GB	ST31230N	10ms	3.5"x1"	$559	$659
1.0GB	**ST31200N**	**9ms**	**3.5"x1"**	**$525**	**$625**
2.1GB	ST12400N	9ms	3.5"	$939	$1039
2.1GB	ST32430N	10ms	3.5"x1"	$999	$1099
2.1GB	**ST32550N**	**8ms**	**3.5"x1"**	**$1129**	**$1239**
4.1GB	ST15150N	8ms	3.5"	$2069	$2169
4.3GB	ST15230N	9ms	3.5"	$1839	$1939
9.0GB	**ST410800N**	11.5ms	5.25"	**$3299**	**$3499**

HEWLETT PACKARD

FAST SCSI-2 DRIVES

1.05GB	HPC3323A	10.5ms	3.5"x1"	$559	$629
2.1GB	HPC2490	8.9ms	3.5"	$999	$1099

WIDE SCSI DRIVES

IBM

				Internal	External
1.0GB	**4S03486**	**8.8ms**	3.5"x1"	**$679**	**$959**
2.0GB	**WIDE SCSI**	**FAST**	3.5"	**$Call**	**$Call**

CONNER

				Internal	External
1.0GB	CFP1060W	<10ms	3.5"x1"	$689	$979

Seagate

				Internal	External
2.1GB	ST12550W	8.9ms	3.5"	$1229	$1499
2.1GB	ST32550W	9ms	3.5"x1"	$1329	$1599
4.1GB	ST15150W	8ms	3.5"x1"	$2129	$2449
9.0GB	**ST410800WD**	**11.5ms**	**5.25"**	**$3699**	**$NA**

FLOPPY DRIVES

1.2MB	**TEAC** 5.25 "Floppy Drive	$47
1.44MB	**TEAC** 3.5" FloppyDrive w/Bkt	$40/45
1.2/1.44MB	**TEAC** Dual Floppy drive	$96
1.2MB	**EPSON** Floppy Drive 5.25"	$43
1.44MB	**EPSON** Floppy Drive 3.5" w/Bkt	$36/41
1.2/1.44MB	**EPSON** Dual Floppy Drive	$89

PORTABLE SOLUTIONS

backpack DRIVES BY MicroSolutions *Computer Products*

NEW!

- Portable, Compact and Sleek.
- No cards to install, plugs into printer port.
- Perfect for Notebooks,Laptops & desktops.
- Simple Installation w/EPP & 1284 port support.

NEW!

MSFD12	Backpack Diskette Drive 1.2MB	$155
MSFD14	Backpack Diskette Drive 1.4MB	$149
MSHD210	Backpack Hard Drive 210MB	$339
MSHD420	Backpack Hard Drive 420MB	$419
MSHD850	Backpack Hard Drive 850MB	$519
MSTP250	Backpack Tape Drive QIC80 up to 250MB	$279
MSTP700	Backpack Tape Drive QIC3010 up to 900MB	$449
MSCD2X	Backpack CD-ROM Double Speed	$309
MSCD4X	Backpack CD-ROM Quad Speed	$349

PINNACLE MICRO *THE OPTICAL STORAGE COMPANY*

650MB Recordable/Playable CD

- Model RCD-1000™
- Double Speed 1MB Cache
- ISO 9660,HFS,Red Book Audio
- SW to Make Data,Audio& Video CDs
- For PC or MAC. w/Controller for PC...$2089

$1945

MONTHLY SPECIALS

MICROPOLIS

3.0GB FAST SCSI-2

- Model MC1936
- 13ms FAST, 5.25" FH
- 5 YEAR WARRANTY

$1139

Seagate

9.0GB FAST SCSI-2

- Model ST410800N
- 11ms FAST, 5.25" FH
- 5400 RPM, 1MB Cache
- 5 YEAR WARRANTY

$3299

EXABYTE®

4.0GB 3.5" SCSI-II DAT BACK-UP

- INT Model EXB-4200C
- Uses 4mm 90M DDS Tapes
- Up to 28MB/min backup compressed
- 4GB Hardware compressed
- External unit.....$929

$829

TAPE BACKUP DRIVES

EXABYTE®

1.5GB Internal FS1G Tape Drive Kit
•Adaptec 16-Bit SCSI Controller Card
•BACKUP Software
•Up to 30MB/Min Transfer
•One Data Cartridge

$689 External Kit..... $829

		INT/EXT
EXB-2501	1GB, 567KB/sec	$489/$619
EXB-2502C	2GB 133MB/sec compressed ..	$Call$Call
FS4000	2-4GB 1MBCache 14MB/min ...	$1229/$1339
FS4000DC	2-4GB 1MBCache 28MB/min ..	$1489/$1599
EXB-4200	2GB upto 28MB/min w/Comp	$799/$879
EXB-4200C	4GB upto 28MB/min w/Comp ...	$929/$929
EXB-8205	2.5-5GBupto32MB/min w/Comp ...	$1299/$1499
EXB-8505	5-10GB upto 60MB/min Comp ..	$1899/$2279
MAN8505	Exabyte Manual for 8505	$33
EXB-8KT	Exabyte 5.25" Bracket for 3.5" Units	$39

HEWLETT PACKARD

The Most Reliable SCSI Tape Backup for MAC,PC or SUN .

DAT SERIES (4mm)

		INT/EXT
35470A	2.0GB	$759/$829
35480A	4-8GB	$959/$949
C1533A	4-8GB HW Data Compression ...	$1019/$1119
C1553A	24-48GB 6 Cart Autoloader ..	$2249/$2369

CONNER *The Storage Answer*

Archive VIPER SERIES

2150S	250MB 112KB/sec	$319 .. $399
2525S	525MB 200KB/sec	$459 .. $559

ANACONDA SERIES

2800	2.0GB-36MB/Min 1/4" ...	$999 .. $1089

Python™ DAT SERIES (4mm)

4320	2GB up to 11MB/min - Internal	$799
4350	2GB up to 11MB/min - External	$989
4354	2GB Turbo-22MB/min 1MBCache-EXT ...	$1049
4326NP	4-8GB 5MB/sec 1MB Cache-INT	$928
4356XP	4-8GB w/Comp 1MB Cache-EXT	$1159
4324T	4GB Turbo 1MB Cache Int/Ext ...	$829/$939

CONNER TAPE•STOR

TS250	250MB Runs Off Floppy Port	$148
TS420	420MB Runs Off Floppy Port	$169
TS420P	420MB Runs Off Parallel Port	$319
TS600	525MB Runs Off Floppy Port	$539
TS850	850MB QIC WIDE Floppy Port ...	$264
TS850P	850MB QIC WIDE Parallel Port	$399
TS4000	4.0GB QIC WIDE-SCSI	$529
TS4000E	4.0GB QIC WIDE-SCSI External ...	$639

SCSI BACKUP SOFTWARE

NovaBack by NovaStor

SINGLE USER DOS/WINDOWS	$35/49
SINGLE USER OS/2	$39
NLM 50/UNLTD USER DOS	$295/395
NLM JUNIOR DOS	$109

RICOH

650MB Recordable/Playable CD

- RS-9200CD
- 1.2MB Data Buffer
- 1MB/Sec. Data Transfer
- 150KB/Sec.
- 5.25FH

$2379

SCSI CONTROLLERS

Adaptec

AMS-1570	**Full SCSI w/ Advanced Audio**	$255
1505	16-Bit TOTAL CD SCSI-2	$59
1515	16-Bit TOTAL CONNECT SCSI-2 KIT	$89
1522	16-Bit ISA 7HD/2FD KIT/CARD Only	$135/$99
1542CF	16-Bit BusMaster Fast SCSI-2 KIT/CARD	$235/$199
1640	32-Bit MicroChannel for PS/2, 7HD KIT	$299
2742T	32-Bit TWIN-EISA KIT, 14HDs	$349
2742W	**32-Bit WIDE EISA KIT w/WIDE CABLE**	**$379**
2825VL	**32-Bit E-IDE/SCSI-2 KIT**	**$169**
2842VL	**32-Bit Fast SCSI-2 VLB KIT**	**$259**
APA-460	Slim SCSI PCMCIA KIT	$269
APA-4510	**PCMCIA CARD Reader ** NEW ****	**$199**
2940	32-Bit PCI SCSI-2 KIT RISC-BASED I/O	$279
2940W	32-Bit PCI Wide KIT w/ WIDE CABLE	$389
3940	DUAL CHANNEL PCI CONTROLLER KIT	$269
T348	Parallel to SCSI Plus 250KB/S	$125
T358	**Parallel to SCSI EPP 1284**	**$159**

BUSLOGIC

KT445C	32-Bit VLB Fast SCSI-2 KIT	$199
KT545C	16-Bit ISA BusMaster Fast SCSI-2 KIT	$209
KT742A	32-Bit EISA SCSI-2 KIT	$289
KT747C	32-Bit EISA Fast SCSI-2 KIT	$299
BT757S	32-Bit EISA Fast Wide SCSI Card	$349
SW-190	Software Drivers for BT757S	$49
KT946C	32-Bit PCI Fast SCSI-2 KIT	$259
KT956C	32-Bit PCI Fast Wide SCSI-2 KIT	$CALL

qlogic *Fast!SCSI-2 CONTROLLERS* Qlogic

QLISA-CD	**16-Bit ISA for CD ROMs**	**$49**
QLISA/FL	16-Bit ISA/ISA-FL	$105/$119
QLVLB/FL	32-Bit VLB/VLB-FL	$189/$205
QLEISA/FL	32-Bit EISA/EISA-FL	$199/$209
QLPCMCIA	PCMCIA Corel SCSI Drivers	$179
QLPCI-B	32-Bit PCI Basic Entry Level	$129
QLPCI-W	32-Bit IQ-PCI **Wide** SCSI-3	$299
QLPCI-10	32-Bit IQ-PCI Model 10 Narrow	$254

MDPT *Distributed Processing Technology*

SmartCache™III & SmartRAID™ SCSI Adapters

PM2021	16 Bit ISA Bus Master Kit	$175
PM2022	32 Bit EISA Bus Master Kit	$299
PM2122	32 Bit EISA ***High Performance***	$395
PM2024	32 Bit PCI Bus Master Kit	$395
PM2124	32 Bit PCI ***High Performance***	$495

IDE & EIDE CONTROLLERS

BUSLOGIC *IDE CACHING CONTROLLERS*

- High Performance w/Avg seek of 0.3ms.
- AutoIDE for easy setup.
- Uses standard 30Pin SIMMS 512KB up to 16MB.
- Disk Mirroring for 100% disk fault tolerance.

KT-410A	32-Bit VLB up to 20MB/Sec 4HD to 4GB	$125
KT-510A	16-Bit ISA up to 5MB/Sec 4HD up to 4GB	$95
KT-910A	32-Bit PCI up to 20MB/Sec 4HD to 4GB	$178

PROMISE TECHNOLOGY, INC.

IDE & SCSI CACHING CONTROLLERS

EIDE2300+	**Enhanced IDE/VLB w/16550 10A Ext BIOS**	**$89**
DC200	16 Bit ISA 4HD/2FD2.88(up to16MB)	$89
DC200M	2FD/4HD ISA 512K (up to 8 5MB) 2.88 Support	$99
DC420VL	VLB 2HD/2FD 512K(up to 1MB)2S/1P	$99
DC440	**BusMaster SCSI/IDE VLB w/IO**	**$189**
DC4030VLE	4HD/2FD 19MB/S Transfer Rate 2.88 Support	$109
DC5030	BusMaster PCI IDE Caching Controller	$Call
DC540	BusMaster PCI FAST SCSI-2 Controller	$Call

HDSS **IDE CONTROLLERS**

200	2HD/2FD Controller w/Cables		$12
211	2HD/2FD w/2 Serial/1Par/1Game		$19
400	16550 2HD/2FD 2-16550 2S/1P/1G	ISA ...	$39
500	16550 2HD/2FD 2-16550 2S/1P/1G	VLB ...	$44

gsi Increases Performance of **IDE** Drives, Floppy Drives **Doubles the Transfer** Rate on Floppy Tape Backups

HI PERFORMANCE CONTROLLERS with INTELLIGENT BIOS

11	8-Bit 4FD(2.88) -256MB Tape Accel Card	$49
18	2HDCD+Enhanced w/IDE-MFM-ESDI-FLL-SCSI	$45
21	ISA BUS 2HD/4FD (2.88 Support)	$59
32	Multi-port IDE,Floppy,Tape, HP I/O Accel	$109
4C	4 Channel, 8 IDE Drive accelerator	$149

PIONEER *LaserMemory™ CD-ROMs*

650MB Recordable/Playable CD - ROM DRIVES & JUKE BOXES AVAILABLE SOON PLEASE CALL

MEMORY SIMMS & CPU'S

PC & MAC Memory

1MB32/60-70ns	$Call
1MBX9/60-70ns	$Call
1MBX8/60-70ns	$Call
4MBX9/60-70ns	$Call
4MBX3/60-70ns	$Call
1X36/60-70ns	$Call
1X32/60-70ns	$Call
2X36/60-70ns	$Call
2X32/60-70ns	$Call
4X36/60-70ns	$Call
4X32/60-70ns	$Call
8X36/60-70ns	$Call

Call for Lowest Prices

REMOVABLES/OPTICALS

SyQuest

88MB (SQ5110C) Int/(Ext w/Cart)	$245/$369
105MB (SQ3105S) Int/(Ext w/Cart)	$239/$369
270MB (SQ3270A) IDE for PCs	**$335**
270MB (SQ3270S) Int/(Ext w/Cart)	**$339/$469**
270MB (SQ3270S) Ext for MAC w/Cart & SW	**$469**
200MB (5200C) Int/Ext w/Cart	$359/$499
200MB (5200C) Ext for MAC w/Cart & SW	$519

CD ROM DRIVES

PIONEER *The Art of Entertainment*

THE HIGH SPEED CD-ROM MINI-CHANGER

- Multisession,MPC,XA,CD-Audio,ISO9660,HS,RR
- DOS,Mac,OS/2,WIN,WMS,Sun OS,Solaris & UNIX support
- 2048/512 Byte Selectable For Workstations
- Includes S/W for DOS/WIN & Mac and 6CD Magazine

DRM-602X 6-Disc 2X Speed 307kb/sec	**$359**
DRM-604X 6-Disc 4X QUADRASPIN 614kb/sec	**$789**
DRM-1804X 18-Disc 4X QUADRASPIN 614kb/sec	**$1799**

•SINGLE DISC QUADRASPIN NEW! **INT/EXT**

DR-U104X 240ms-614kb/sec-256K	**$349/$449**
DRM-A600 6 CD MAGAZINE	**$29**

TOSHIBA

- 256K Cache Buffer • Caddy Included
- MultiSession PhotoCD,XA,MPC2 Compliant

INT/EXT

XM-3501B Quad-Speed 120ms/600kb	**$299/$389**

NEC

DATA & VIDEO CD-PLAYBACK CD-ROMs

		KIT*/UNIT
CDR401	3XpPlus240ms/500kb/SCSI-2	$469/$389
CDR501	4X/220ms/600kb/SCSI-2	$469/$389
CDR601	4Xe220ms/600kb/SCSI-2	$549/$489

*KIT Includes(16-Bit card&sw,Microsoft Encyclopedia)

DIAMOND MULTIMEDIA NEW!

DIAMOND 1000/4000/5000 COMPLETE MULTIMEDIA KITS

- High Quality Stereo speakers.
- Hot selection of the best selling CD titles.
- 16-bit CD Quality sound card (Wave Table Upgradable).
- Mitsumi or Teac 4XCD (Panasonic/Sanyo 2XCD inside).
- Quickstart video for HASSLE FREE installations.

NEW!

•M1000	Int 2X-CD MIC & Headphone w/30Titles	$329
•M4000	Internal 4X CD-ROM & 11 Titles	$419
•M5000	Int 4X-CD MIC & Headphone w/30Titles	$459

PLEXTOR

4PLEX *Lightning Fast* Quad Speed CD-ROMs

•125/150ms Random seek • 600kb/sec Data Transfer Rate

PX-43CS/48CS	4-Speed, 256K Cache	**$329/$479**
PX-43CH/48CH	4-Speed,1MB Cache	**$399/$499**
PX-48CHMAC	4-Speed,1MB Cache	**$529**

CHINON *SCSI-II CD-ROM DRIVE* **INT/EXT**

CDS-535 Int 2X,220ms,256kCache,300kbs	**$199/$369**

TEAC CD-55A

•CD-55AB SuperQuad 4X ATBare Drive	$199
•CD-55A SuperQuad 4X ATKIT	$219

To Order Call

800-252-9777

HDSS COMPUTER PRODUCTS

Your Hard Drive & Multimedia Super Source

PURCHASE ORDERS WELCOME

"Dedicated to serving Purchasing Agents Worldwide"

Gov't University, & Approved Corporate P.O.s Welcome

CORPORATE DEPT. (510) 494-8100

6225 Jarvis Ave. Newark, CA, 94560

M-F:6 -7; Sat 9am-5pm; Sun 10-4

- NO SURCHARGE FOR CREDIT CARDS
- 30 Day Money Back Guarantee.
- Dealers Qty Pricing is Available.
- Returns accepted with RMA#, and in original Packing and Condition.
- Returned Items for refund are subject to 12% restocking fees.
- Memory SIMMs, CPUs, and Items that include Softwareare not refundable.
- Price & Availability are subject to change.Not responsible for typos ortechnical errors.
- All logos are the property of their respective companies.

CORPORATE HDSS®

- Pre-aproved purchase orders for fortune 1000 companies and government agencies.
- Qty and dealer discounts are available.
- All educational institutions are welcome.
- International orders and quotes are welcome.

(510) 494-8100

fax in your P.O's to: (510) 494-8501

VISA MasterCard P.O.s

Electronic & Bank Contact Verification To Prevent Fraud

Full Cooperation with Police for all fraud Orders

Copyright 1995 Peterson Maintenance South all. All rights are reserved. Prices and availability are subject to change. Not responsible for typographical errors.

HAPPY NEW YEAR!

1995 Year of the Boar

CALL FOR PERFORMANCE & BEST PRICES

1-800-724-0210

TECHNOLOGY CORPORATION

16371 GOTHARD STREET, SUITE #D, HUNTINGTON BEACH, CALIFORNIA 92647
Telephone: (714) 375-0210 • Fax: (714) 375-0214

Hours: Monday - Friday: 9:00 am - 6:00 pm PT
Saturday: 9:00 am - 3:00 pm PT

DEALERS ARE WELCOME!

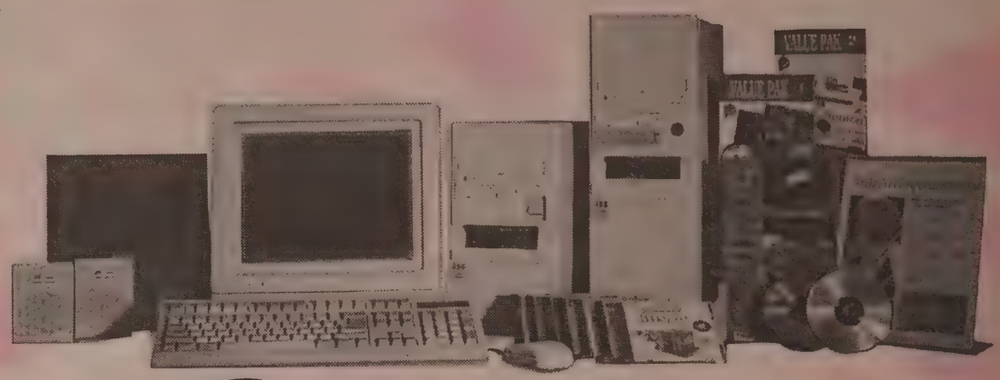
PRODUCT DESCRIPTIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE ON-SITE SERVICE MAY NOT BE AVAILABLE IN SOME AREAS
ALL TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS

ALWAYS THE BEST BUY IN MULTIMEDIA!

Pentium 90 Multimedia — BEST BUY

- 4x Quad Speed Photo CD-ROM
- "Creative Lab" Sound Blaster 16
- 2 High Class Speakers
- 8 MB Ram & 256K Cache
- 830MB Fast IDE HD
- 1.44 Floppy Drive
- 2 High Speed Serial & 1 Enhanced Parallel Port
- PCI Windows Accelerator w/2MB SVGA Card
- 15" 1280 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power

$2285 or **$65** Per Month O.A.C.



Pentium 66 Multimedia — LOWEST PRICE

- 2x Double Speed Photo CD-ROM
- 16 Bit Sound Card
- 2 High Class Speakers
- 8 MB Ram & 256K Cache
- 560MB Fast IDE HD
- 1.44 Floppy Drive
- PCI IDE w/2 Serial & 1 Parallel Port
- PCI Windows Accelerator w/2MB SVGA Card
- ACER 14" 1024 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power

$1750 or **$64** Per Month O.A.C.

486DX2-66 Multimedia — BEST BUY

- 2x Double Speed Photo CD-ROM
- 16 Bit Sound Card
- 2 High Class Speakers
- 4 MB Ram & 256K Cache
- 560MB Fast IDE HD
- 1.44 Floppy Drive
- VLB IDE w/2 Serial & 1 Parallel Port
- VLB Windows Accelerator w/1MB SVGA Card
- ACER 14" 1024 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Mini Tower Case w/230W "UL" Power

$1150 or **$42** Per Month O.A.C.

Pentium 100 Multimedia — SUPREME

- Toshiba 4X Quad Speed SCSI Multi-Session Photo CD-ROM
- "Creative Lab" Sound Blaster 16SCSI and 14 CD Titles
- 2 High Class Speakers
- 16 MB Ram & 256K Cache
- Adaptec 2940W PCI Wide SCSI-3 Controller
- 1.06 GB Fast Wide SCSI-3 HD and 1.44 MB Floppy Drive
- 2 High Speed Serial & 1 Enhanced Parallel Ports
- Diamond Stealth 64 PCI 2 MB SVGA Card
- ACER 17" 1280 .28 NI "GREEN" SVGA
- 101 Enhanced Keyboard, Hi-Res 3 Button Mouse
- Middle Tower Case w/230W "UL" Power

$3395 or **$105** Per Month O.A.C.

MULTIMEDIA PACKAGES

2x Double Speed Multi-Session Photo CD
"Creative Lab" Sound Blaster CD
2 Speakers
5 CD Titles (Aldus Photostylus, Encyclopedia...)
2X **$180**

2x Double Speed Multi-Session Photo CD
Sound Blaster 16-by "Creative Lab"
2 Speakers
15 CD Titles (Aldus Photostylus, Encyclopedia...)
2X **$265**

4x Quad Speed Multi-Session Photo CD
Sound Blaster 16-by "Creative Lab"
2 Speakers
14 CD Titles (Aldus Photostylus, Encyclopedia...)
4X **$320**

Toshiba 4x Quad Speed SCSI Multi-Session Photo CD
Sound Blaster 16-by "Creative Lab"
2 Speakers
14 CD Titles (Aldus Photostylus, Encyclopedia...)
4X **$445**

CD TITLES

Five star games (200)	$9
New Kid's Edutainment #1	9
Dictionary of Living World	9
American Heritage Talking Dictionary	19
Business Phone Directory	19
Compton's Encyclopedia	35
Microsoft Encarta	65
Power Rangers	19
Barney Goes To School	19
Arthur's Teacher Trouble	15
Dinosaur Encyclopedia	19
Just Grandma & Me	15
Kid's Reads: Aesop's Fables	15
San Diego Zoo/Animals	15
Microsoft Golf	29
Iron Helix	19
Mad Dog II	19
Outpost	25
Return to Zork	19
Seventh Guest	22

SOUND CARD

Sound Blaster 16	$79
Sound Blaster 16 SCSI	105
Sound Blaster 32 AWE	279

CD-ROM DRIVES

Sony 2x CD	$115
NE 3x SCSI CD	249
Teac 4x CD	225
Toshiba 4x SCSI CD	298

SPEAKERS

100 Watt Power Amplified	$55
125 Watt Power Amplified	75

Authorized Dealer for: HEWLETT PACKARD · Apple® Computer, Inc. · COMPAQ · EPSON CUSTOMER CARE CENTER · Canon · IBM

Your Complete Computer Resource!

Since 1988!

Apple Power Mac

Power Macintosh™ 6100/66

- 60MHz Power PC
- 1MB VRAM Video Card
- 8MB RAM, 250MB HD
- CD ROM
- 16 Bit Stereo sound In/Output
- System 7.5

$1845

Power Macintosh™ 8100/80

- 80MHz Power PC
- 2MB VRAM Video Card
- 8MB RAM, 500MB HD
- CD ROM
- Ethernet, 3NuBus Slots
- System 7.5

$3695

Power Macintosh™ 7100/66

- 66MHz Power PC
- 1MB VRAM Video Card
- 8MB RAM, 500MB HD
- CD ROM
- Ethernet, 3NuBus Slots
- System 7.5

$2599

Authorized Dealer

Epson

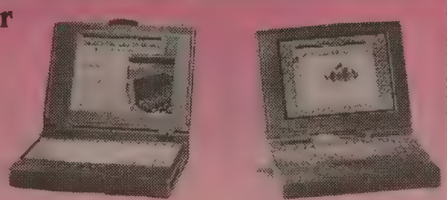
ActionNote 650 Dual Scan Color

- 486DX2-50MHz
- 4 MB exp. to 20 MB
- 260 MB HD, 1.44 MB FD
- 10.3" Dual Scan Screen
- 16mm Center Trackball
- 2 PCMCIA II or 1 PCMCIA III
- VLB Accelerated Card w/1MB

Software:

- MS DOS, Windows, Prodigy, America Online, ClarisWorks

$1799



ActionLaser 1100 300 dpi	$439
ActionLaser 1400 600 dpi	679
ActionLaser 1500 6 ppm	489
Stylus Color 720 dpi	515
LQ-570+	245
LQ-1070+	395

Hewlett Packard

Hewlett Packard Printers & Scanners

HP DeskJet/DeskWriter 320 (Color Option)	$284/284
HP DeskJet/Desk Writer 540 (Color Option)	278/278
HP DeskJet/DeskWriter 560C	456/456
HP DeskJet 1200C/1200C Postscript	1315/1925
HP LaserJet 4L/4ML	535/955*
HP LaserJet 4P/4MP	915/1295
HP LaserJet 4 Plus/4M Plus	1368/1855
HP LaserJet 4Si/4Si MX	2785/3995
HP LaserJet 4V/4MV	Call/Call
HP Color LaserJet	Call
HP ScanJet 3P (IBM or MAC)	Call
HP ScanJet IICX (IBM or MAC)	745*

*After Rebate

WE HONOR GOVERNMENT, CORPORATE & SCHOOL P.O.'s

All prices, specifications, and product availability are subject to change without prior notice. Not responsible for any typographical errors. Financing figures are estimated and based on 36 months and financing is on approved credit. Prices reflect 3% cash discount. C.O.D. order accepted. All systems come with 1 year parts and labor limited carry-in warranty. All brand names are trademarks of their respective companies. All sales are final.

Control Card

IDS IDE I/O	
ISA IDE W/16550 I/O	
VLB IDE I/O	
VLB IDE W/16550 I/O	
PCI IDE	
PCI SCSI-II (NCR ChipSet)	
PCI Adaptec-2940 SCSI-2	19
PCI Adaptec-2940W SCSI-3	255

Fax/Modem

US Robotics 14.4 INT.	$105
US Robotics 14.4 EXT.	
US Robotics 28.8 INT. V.34	
US Robotics 28.8 EXT.	
Rockwell 14.4 INT.	
Rockwell 14.4 EXT.	
Intel 14.4 PCMCIA	
14.4 PCMCIA	

Floppy Drive

Teac 1.2MB, 5 1/4"	
Teac 1.44MB, 3 1/2"	
Teac 1.2 & 1.44MB Combo	
Mitsumi 1.2 MB 5 1/4"	
Mitsumi 1.44MB, 3 1/2"	
Panasonic 1.2MB, 5 1/4"	
Panasonic 1.44MB, 3 1/2"	

Hard Drive

Conner 420MB IDE, 12ms	
Conner 540MB IDE, 12ms	
Conner 850MB IDE	
Conner 1.06GB IDE	
Conner 540MB SCSI-2	
Conner 1.0GB SCSI-2	
Conner 2.0GB SCSI-II	
Maxtor 270MB IDE	
Maxtor 420MB IDE	
Maxtor 540MB IDE	
Western Digital 420MB IDE	
Western Digital 540MB IDE	
Western Digital 1.0GB IDE	
Western Digital 850MB IDE	
Quantum 540MB IDE	
Quantum 730MB IDE	
Quantum 1.0GB IDE	
Quantum 2.0GB SCSI	
Samsung 420MB IDE	178
Samsung 540MB IDE	1

Motherboard

P5-90/100 EISA/PCI Dual CPU	
P5-90 PCI Intel Plato w/256K	
P5-90/100 PCI w/256, IDE I/O	
P5-60/66 PCI w/256K	
486DX4/DX2 PCI w/256K	1
486DX4/DX2 VLB w/256K	10
486DX2 VLB w/256K, Opti	9
486SLC2-66 VLB	
386DX-40 w/CPU & 128K	89

Case

Mini Tower w/230W	39
Mini High Tower w/230W	38
Mid Tower w/230W	59
Full Tower w/250W	69

RAM

30Pin 1x3 Simm, 70ns	
30Pin 4x9 Simm, 70ns	
72Pin 1x32 Simm, 70ns	
72Pin 2x32 Simm, 70ns	
72Pin 4x32 Simm, 70ns	

Keyboard

Bits 101 Enhanced	$15
Maxiswitch 101 Enhanced	
Fujitsu 101 Enhanced	
Focus 2001 101 Enhanced	
Focus 9000 101 Enhanced	
MicroSoft Nature Key	

Mouse

Logitech MouseMan II Serial	$42
Logitech MouseMan II Bus	58
MicroSoft Mouse, Serial	
MicroSoft Mouse, Bus/PS2	49
3 Button Compatible Mouse	1
TrackBall, Serial	

Monitor

ViewSonic V21 21", 1600x1280 .28	1
ViewSonic V17 17", 1600x1280 .28	
ViewSonic V17G 17", 1280x1024 .28	
ViewSonic V15 15", 1280x1024 .28, 60Hz	
ViewSonic V15ES 15", 1024x768 .28, 76Hz	
MAG MXP-17F, 1600x1280, .26	
MAG MX-17F, 1280x1024, .26	
MAG DX-17F, 1280x1024, .26	
MAG DX-15F, 1280x1024, .28	
CTX 1765GM 17", 1280x1024 .28	
CTX 1565GM 15", 1024x768 .28	3
CTX 1451ES 14", 1024x768 .28	
Acer 76I 17", 1280x1024 .27NI, Digital	
Acer 56L 15", 1280x1024 .28 Digital	
Acer 34T 14" , 1024x768 .28NI, EPA	
NEC XE21, 1280x1024 .28, 60Hz, LR	
NEC XP21, 1680x1200 .28, 70Hz, LR	
NEC XE17, 1024x768 .28, 76Hz, LR	
NEC XP17, 1280x1024 .28, 76Hz, LR	
NEC XE15, 1024x768 .28, 76Hz, LR	
NEC XP15, 1024x768 .28, 76Hz, LR	

Tape Backup

Colorado Jumbo 250MB EXT. QIC-80	
Colorado Jumbo 250MB INT. QIC-80	
Colorado PowerDat 2.0GB INT, SCSI	
Colorado PowerDat 2.0GB EXT, SCSI	
Colorado PowerDat 4.0GB INT, SCSI	
Colorado PowerDat 4.0GB EXT, SCSI	
Colorado Jumbo 350MB INT. QIC-80	
Colorado Jumbo 350MB EXT. QIC-80	
Conner 250MB INT. QIC-80	
Conner 250MB EXT. QIC-80	
WangDat 1.0GB INT. SCSI	

Video Adapter

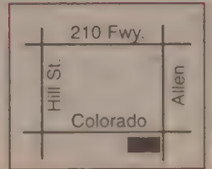
ATI Math-64 PCI/VLB w/4MB VRAM	
ATI Math-64 PCI/VLB w/2MB VRAM	
ATI Math-64 PCI/VLB w/2MB DRAM	
ATI Math-32 PCI/VLB w/1MB DRAM	
Diamond Stealth-64 PCI/VLB 4MB VR	
Diamond Stealth-64 PCI/VLB 2MB VR	
Diamond Stealth-64 PCI/VLB 2MB DR	
Diamond Stealth-64 PCI/VLB 1MB DR	
Orchid Kelvin-64 PCI/VLB w/2MB	
Cirrus Logic 5428 VLB w/1MB	
Trident 9400 VLBw/1MB	
Trident 9420 PCI w/2MB	
Trident 8900 ISA w/1MB	
#9 Maxtor	

90 Days
Same as Cash
Financing Available
Subject to credit approval.
We Accept

VISA MasterCard AMERICAN EXPRESS

Protect Your PC Investment
We offer 4 YEAR On-Site Service Contract
GE Consumer

Service
CBM Pasadena Computer
(818) 568-1088
Fax (818) 568-9132
1756 E. Colorado Blvd.,



Pasadena, CA 91106

Hours:
Mon-Fri 9:00-6:00

BETTER, FASTE

P5 PCI SCSI-2

- Pentium PCI Motherboard
- 8MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 1 GB SCSI-2 Hard Drive
- ATi Mach 64 Graphic Engine
- 2MB VRAM
- PCI SCSI-2 Controller
- 2 Serial, 1 Parallel, 1 Game Port
- MAG DX17F 17" Flat-Screen Monitor
- Focus 8000 Keyboard & Calculator
- Microsoft Serial Mouse

90MHz $2795

P5 PCI IDE

- Pentium PCI Motherboard
- 8MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 540MB IDE Hard Drive
- ATi Mach 64 Graphic Engine
- 2MB VRAM
- IDE FD/HD Controller
- 2 Serial, 1 Parallel, 1 Game Port
- MAG DX17F 17" Flat-Screen Monitor
- Focus 8000 Keyboard & Calculator
- Microsoft Serial Mouse

90MHz $2459

486 PCI + VLB IDE

- 486 PCI + VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA 0.28mm Monitor N.I.
- Enhanced 101 Keyboard
- Serial Mouse

DX4/100MHz $1145
DX2/66MHz $995

486 VLB IDE

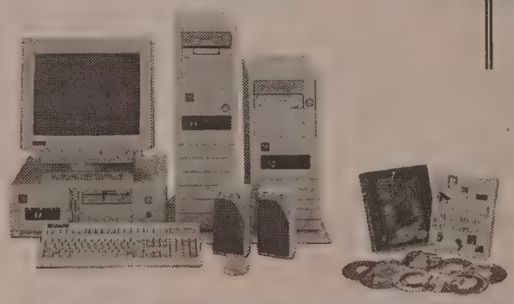
4X SPEED MULTI-MEDIA

- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse
- Mitsumi Quad Speed CD-ROM Drive
- Sound Blaster 16 Sound Card
- 2 Speakers w/Built-in Amplifier
- CD-ROM Software Titles

DX4/100MHz $1425
DX2/66MHz $1275

GLIDE

through even the most advanced applications riding the innovation of our new 2X and 4X CD Drives at the speed you need for today!!



486 VLB IDE

2X SPEED MULTI-MEDIA

- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse
- Mitsumi or Panasonic 2x Speed CD-ROM
- Sound Blaster 16 Sound Card
- 2 Speakers w/Built-in Amplifier
- CD-ROM Software Titles

DX4/100MHz $1345
DX2/66MHz $1195

486 VLB IDE

- 486 VESA Local Bus Motherboard
- 4MB RAM, 256KB Cache
- 3.5" 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VLB 32 Bit SVGA (1MB)
- VLB 32 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" SVGA N.I. 0.28mm Monitor
- Enhanced 101 Keyboard
- Serial Mouse

486DX4/100MHz $1095
486DX2/66MHz $945

486SX SYSTEM

SPECIAL SALE OF THE MONTH

- 486SX/33MHz Motherboard
- 4MB RAM
- 210MB IDE Hard Drive
- IDE Hard & Floppy Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 3.5" 1.44MB Floppy Drive
- VGA Graphic Card
- VGA Color Monitor
- 101 Enhanced Keyboard
- Lifetime Labor Warranty
- 1 Year Parts Warranty

ONLY $699

4SLC IDE

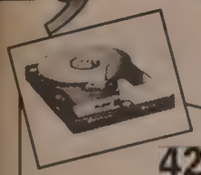
- 486SLCMHz Motherboard
- 2MB RAM
- 3.5" 1.44MB Floppy Drive
- 200MB IDE Hard Drive
- 16 Bit SVGA (1MB)
- 16 Bit IDE I/O Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 14" VGA Monitor
- Enhanced 101 Keyboard
- Serial Mouse

SLC2/66MHz $599
SLC/33MHz $569

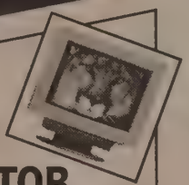
TRADE-IN YOUR 486DX/33MHz CPU & UPGRADE TO 486DX2/66MHz FOR ONLY $135!

TSC Computer Products
1819 N. Floraldale Ave.
So. El Monte, CA 91733
Tel (818) 579-2405
Tech. Support (818) 579-1446
FAX (818) 579-9572

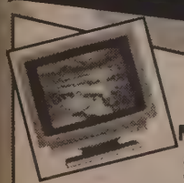
R, STRONGER!



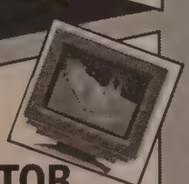
420MB 3.5" IDE HARD DRIVE
(13ms Access Time)
$165



15" SVGA MONITOR,
1280x1024, .28dp, FLAT SCREEN, 72Hz REFRESH
$295



17" MAG DX17F SVGA MONITOR,
1280x1024, .26dp
$595



14" MONITOR,
1024x768, .28dp, NON-INTERLACED
$215

MOTHERBOARD

PCI Pentium 90MHz w/256K Cache (Intel Chipset)	$895
PCI Pentium 90MHz w/256K Cache (Opti Chipset)	$815
PCI Pentium 90MHz w/256K Cache (SIS Chipset)	$795
PCI + VLB 486DX4-100MHz w/256K Cache	$360
PCI + VLB 486DX2-80MHz w/256K Cache	$315
PCI + VLB 486DX2-66MHz w/256K Cache	$285
VLB 486DX4-100MHz w/256K Cache	$340
VLB 486DX2-80MHz w/256K Cache	$295
VLB 486DX2-66MHz w/256K Cache	$265
VLB 486DX-33MHz w/256K Cache	$185
ISA 486SX-33MHz	$109
ISA 486DLC-40MHz w/128K Cache	$105
ISA 486SLC2-66MHz	$109
ISA 486SLC-33MHz	$75
ISA 386DX-40MHz w/128K Cache	$78
"All Pentium & 486's CPU RECOMMENDED CPU FAN".	
486DX CPU Cooling Fan	$10
Pentium P5-90 CPU Cooling Fa	$20
Pentium P5-66 CPU Cooling Fan	$20
486SLC CPU Cooling Fan	$18
486DX CPU Active Cooler	$35

VIDEO CARD

VGA 16 Bit 256K Card (800x600 Res.)	$26
VGA 16 Bit 512K Card (1024x768 Res.)	$34
VGA 16 Bit 1MB Card (1024x768x256 Color)	$55
VLB Cirrus Logic w/1MB DRAM	$69
VLB Trident w/1MB DRAM	$69
VLB Trident w/2MB DRAM	$119
VLB S3-805 Chip Windows Acc. w/1MB	$75
VLB S3-805 Chip Windows Acc. w/2MB	$125
VLB ATi Mach 32 w/2MB DRAM	$145
VLB ATi Mach 32 w/2MB VRAM	$225
VLB ATi Mach 64 w/2MB DRAM	$175
VLB ATi Mach 64 w/2MB VRAM	$265
VLB ATi Mach 64 w/4MB VRAM	$459
VLB Diamond Stealth 64 w/2MB DRAM	$165
VLB Diamond Stealth 64 w/2MB VRAM (Upgradable to 4MB)	$265
VLB Diamond Stealth 64 w/4MB VRAM	$425
PCI Cirrus Logic w/1MB DRAM	$95
PCI Cirrus Logic w/2MB DRAM	$145
PCI ATi Mach 64 w/2MB DRAM	$175
PCI ATi Mach 64 w/2MB VRAM	$265
PCI ATi Mach 64 w/4MB VRAM	$459
PCI Diamond Stealth 64 w/2MB DRAM	$165
PCI Diamond Stealth 64 w/2MB VRAM	$265
PCI Diamond Stealth 64 w/4MB VRAM	$425

MONITOR

VGA Monitor	$155
14" SVGA 1024x768, .28mm	$215
15" KFC 1024x768, N-I .28mm	$295
15" MAG DX15F 1280x1024, N-I .26mm	$319
17" MAG DX17F 1280x1024, N-1 .26mm	$595

CASE

Mini Tower Case w/Power Supply	$45
Mid Size Tower Case w/Power Supply	$60

HARD DRIVE

IDE 210MB Hard Drive	$135
IDE 420MB Hard Drive	$165
IDE 540MB Hard Drive	$195
IDE 700MB Hard Drive	$285
IDE 850MB Hard Drive	$275
IDE 1GB Hard Drive	$395
SCSI-2 535MB Hard Drive	$235
SCSI-2 1.0GB Hard Drive	$495
SCSI-2 2GB Hard Drive	$935

CONTROLLERS

AT I/O 2 Serial, 1 Parallel, 1 Game Port	$14
High Speed I/O (16550 UART) 2 Serial, 1 Parallel	$29
IDE Hard & Floppy Controller & I/O	$15
IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART)	$42
VLB Enhanced IDE Hard & Floppy Controller & I/O	$29
Promise EIDE 2300 Plus Enhanced IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART)	$69
IDE Cache Controller (DC600)	$95
SCSI-2 Cache Controller (DC800)	$225
VLB IDE Cache Controller (DC680)	$105
VLB IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART)	$49
VLB SCSI-2 Controller (Adaptec 6360 Chipset)	$99
VLB SCSI-2, IDE Hard & Floppy Controller & I/O (Adaptec 6360 Chipset, 16550 UART)	$135
PCI IDE Hard & Floppy Controller & Hi-Speed I/O (16550 UART)	$59

KEYBOARD

101 Enhanced Non-click Keyboard	$19
101 Enhanced Click Keyboard	$23
FOCUS 2001 Keyboard	$30
FOCUS 8000 Keyboard	$35
FOCUS 9000 Keyboard	$58

FLOPPY DRIVE

TEAC 1.2 Floppy Drive, 5.25"	$45
TEAC 1.44 Floppy Drive, 3.5"	$35
TEAC Dual Floppy Drive	$105

MEMORY

1MB SIMM 30pin	$38
4MB SIMM 30pin	$125
4MB SIMM 72pin (1x32/1x36)	$135/$145
8MB SIMM 72pin (2x32/2x36)	$275/$315
16MB SIMM 72pin (4x32/4x36)	$455/$475
32MB SIMM 72pin (8x32/8x36)	$1050/$1150

We also take Memory trade-in's!

MICE

Mouse Hi-Resolution	$18
Mouse CP-3	$10
Microsoft Mouse	$35
Truedox Trackball	$25

CD-ROM DRIVE

Mitsumi Quad Speed CD-ROM Drive	$199
Panasonic Double Speed CD-ROM Drive	$115
Toshiba Quad Speed CD-ROM Drive	$295
Sony Double Speed CD-ROM Drive	$114
Mitsumi Double Speed CD-ROM Drive	$113
Sound Blaster 16 Multi-CD Sound Card	$78

SOUND BOARDS

Sound Blaster 16	$115
Sound Blaster Pro	$110
Pro Audio Spectrum 16	$125
Sound Boomer Card	$58
Speaker For Sound Board	$15

TAPE BACKUP DRIVES

Colorado 250MB Internal Tape Backup Drive	$155
Conner 250MB Internal Tape Backup Drive	$145
Conner 420MB Internal Tape Backup Drive	$189
2120 Tape Cartridge	$15

FAX & MODEM

2400bps Internal Modem	$30
9624bps Internal Fax Modem	$40
14400bps Internal Fax Modem	$59
14400bps External Fax Modem	$115

NETWORK CARD

Ethernet 8 Bit (NE1000)	$45
Ethernet 16 Bit (NE2000)	$35
Ethernet 16 Bit (10 Base-T)	$45

TERMS & CONDITIONS

- 1 Year Warranty (Parts & Labor)
- Prices Are Subject To Change Without Notice
- Defective Merchandise Must Have RMA Authorization
- 15% Restocking Charge
- Terms COD Or Prepaid (Cashier Check, Company Check, OAC)
- All Systems 14 Day Money Back Guarantee
- Quantity Discount Available
- Technical Support: (818) 579-1446

IDE CACHING CONTROLLER
w/1MB, IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$95

VLB IDE CACHING CONTROLLER,
IT SUPPORTS 4HD & 2FD MAX. 16MB (256/1MB/4MB Simm & Can Be Mixed)
$105

HIGH SPEED I/O CARD,
2 SERIAL PORT/2 PRINTER PORT (FIFO) w/16550 CHIP 4 INDEPENDENT IRQ LEVELS FOR SERIAL PORTS (IRQ 3,4,5,9)
$29

540MB 3.5" IDE HARD DRIVE,
3.5" FORMAT, 1" HEIGHT
$195

ASC COMPUTER
2776 Ventura Blvd. Suite A
Woodland Hills
Tel (818) 876-9187
FAX (818) 876-9189

NSC
1928 Tyler, Suite A-168
So. El Monte, CA 91733
Tel (818) 454-1039
FAX (818) 454-1040

UPGRADE YOUR RAM TO 16MB
FROM 4MB > 16MB $399
FROM 8MB > 16MB $299
JUST PLUG & PLAY!

NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.
PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Classifieds

Accessories

XDR II Co. 800/541-7425
14758 Ventura Blvd., Ste. #713, Sherman Oaks, CA 91403-3667
Los Angeles: 818/701-7425 Fax: 818/752-7425

DISKETTES

Formatted	100% Error Free	Qty. 50
5.25"	DS/DD	19¢
5.25"	DS/HD	18¢
3.5"	DS/DD	20¢
3.5"	DS/HD	32¢

Data Cartridges

Brand	Part Number	Qty. 3
3M	DC2120	$13.95
KAO	KC2120	$11.95
3M	DC2120	$16.95
Verb.	DL2120	$15.95

If it says: "We will beat any advertised price"...
It means: "We over-charged you in the first place, and if you can catch us we will fix it."
At XDR II: "*We set the prices, they try to beat.*"

Shipping: (FOR: Los Angeles) Actual UPS+$.95, COD +$5.00. Quantity Discount: Available. 10+ years of media experience. XDR II Co. is a Xanadu Enterprises Company. (c) 1994.

AAA Business Accessories Incorporated

DISKETTES

Premium FORMATTED *(100% Error Free)*

	Qty 500	Qty 100
3.5" DS/HD	31¢	32¢
3.5" DS/DD	20¢	21¢
5¼" DS/HD	19¢	20¢

We Will Beat Any Advertised Price
1-800-214-4444

8Nec Multisync Monitor Lenses $30.00 a piece. Leave Message @ (714) 897-4878 Rick.

YOUR 15 word ad in five diff. newspapers! throughout CALIFORNIA. Some 4 wks $25.00: S.K. Schramm, P.O. 206, SA, CA 92707.

Art

Graphic Design
Logos, letterheads, flyers, brochures, ads, corporate identity, full color, B/W, PC, MAC & much more... Low prices for top notch results. From concept to print. We will meet any deadline. Call for free consultation.
OFF LIN DESIGN
310 479 1467
for graphics specialist

Books

At Computer Books 4 Less, all books are 10% to 80% Off List Price. Books for the Beginner, Intermediate and Advanced Computer Wiz. We supply Bulk Quantity Diskettes 3.5/5.25 All Formats. Call us at: (619) 431-BOOK. 8068 Clairemont Mesa Blvd., San Diego, CA 92111.

LOOKING INTO A MONITOR- A buyer's guide to buying a computer monitor for $3.95. Call (800) 275-4583 in Southern California or (714) 577-9441. Quantity discounts available - dealer inquiries welcome.

Bulletin Boards

The Crusader BBS
(213) 466-4482 Hollywood (310) 348-9746 Westchester

A 5 Line BBS
6 Online Cd-roms
Internet Usenet E-Mail
Chat and Games
Fidonet Conferences
100,000 + Files
Geoworks Files
All lines 14,400

Where people count more than hardware and software.....
Register online now for 30 free min. day (limited downloads) or subscribe for $45 yr. (unlimited time and downloads).
SysOp: Jack Farmer 1:102/753

LIBERTY BBS modem 800-474-1818. Local access phone numbers from 9 Calif. area codes. Internet E-mail & Usenet Newsgroups. Linked nationwide for chat 6pm - midnight every evening! Free time on first & every call!

MR WONDERFUL'S LAIR (213)261-8055 2400/14400. FREE 4 week account. Internet, ECHO Mail, Adult/Shareware 12 CDs online.

Modemboy. Gay, bi, curious. Instant access, 32 lines, photos, free chat, campy fun! (310) 659-7000, (310) 417-5157, (818) 996-7900, (818) 846-3000.

UNZIP IT! Download provocative adult photos. 1(900) 844-2200. 69¢ per minute. 18+.

LOVE ADVICE and COMPATIBILITY EVALUATIONS by DR. TRACY CABOT. Famous Author of LETTING GO, HOW TO MAKE A MAN FALL IN LOVE WITH YOU, HOW TO WIN THE WOMAN YOU WANT, and other bestsellers. As seen on PRODIGY, DONAHUE, OPRAH, etc. (818) 901-6117.

K2 BBS (714) 838-8100. Multi-player DOOM, 18 lines, Internet mail, CD-ROMS, 28.8K, free trial period.

VIVID INTERACTIVE ONLINE (818) 908-9424. The world's largest producer of adult films and interactive entertainment presents its new online network. Tons of adult pictures, files, messages, games, chat, internet, and CD-ROM support. E-mail Vivid's exclusive stars, read their biographies and interviews. Mention MicroTimes code "MT4" and get an adult CD-ROM sampler for $5 including shipping.

Gadgets and Gizmos, (714) 992-1732. Fun, Free, all welcome. Over 1000 items to buy! GUI and MAC term interface online.

MICROTIMES classifieds

HOW TO PLACE YOUR CLASSIFIED AD IN MICROTIMES

MINI DISPLAYS: 1 column inch = 1 5/16" across x 7/8" down. $59 per col/inch, camera ready art, or $59 + $20 for 1x typesetting/production fee.

BUSINESS ADS: Rates are $20 for 15 words or less. $.50 for each additional word. Your phone number counts as one word. First few words or line is bolded.

CATEGORIES: See index to choose the classification that best describes your product or service.

FREE ADS: Private individuals may have one free classified ad one time of 15 words or less under Hardware, Software, or Accessories only. Mail coupon by the noon deadline for that issue, no phone orders for free ads.

No refunds will be given after copy is received. Credit may be given under certain circumstances.

Mail, deliver or fax this coupon along with payment by the noon deadline for that issue.

TO RESERVE SPACE:
Phone Orders
(213) 8518600
Fax Orders
(213) 851-8303
with Visa or MasterCard Only

CLASSIFIED CATEGORIES
- ○ Accessories
- ○ Bar Coding
- ○ Bulletin Boards
- ○ Cartridge Refill
- ○ CD-ROM
- ○ Computer Rentals
- ○ Data Conversion
- ○ Data Recovery
- ○ Desktop Publishing
- ○ Hardware
  - ○ For Sale
  - ○ Wanted
- ○ Miscellaneous
- ○ Personals
- ○ Optical Scanning
- ○ Repairs
- ○ Services
- ○ Software
  - ○ For Sale
  - ○ Wanted

CAREER MARKETPLACE CATEGORIES
- ○ Employment Information
- ○ Jobs Offered

CONSULTANTS NETWORK CATEGORIES
- ○ Accounting
- ○ Business Opportunities
- ○ Engineering
- ○ Finance
- ○ General
- ○ LAN
- ○ Legal
- ○ Programming
- ○ Technical Writing
- ○ Training

○ **MULTIMEDIA**

○ Other_____

_____
_____
_____
_____
_____

Cost of ad_____ x number of issues to run_____ = Amt. enclosed_____
Discount: 7x = 15% 14x = 25%

○ Classified ○ Career Marketplace ○ Consultants Network ○ Multimedia

○ Check/MO ○ Visa ○ MasterCard Credit Card #_____Exp. Date_____

Name_____

Address_____

City_____State_____Zip_____

Phone (_____)_____

SEND TO: MicroTimes Classifieds, 6767 Forest Lawn Drive, Ste. 110, Los Angeles, CA 90028

DEADLINE FOR INSERTION IN THE MARCH 6, 1995 ISSUE IS NOON ON FRIDAY, FEBRUARY 10, 1995.

Classifieds

Bulletin Boards

XTASY (818) 330-7596 28.8 kbaud ANSI/RIP. Mega Adult Files Xtasy style. Sports/Stats Internet E-Mail and Newsgroups 10+GIG.

HOMES FOR SALE ONLINE- Modem (310) 471-6159. Almost 1,000 homes online throughout Southern California! Free to review and submit homes. Voice: (310) 649-6991 X101.

900Forms (213) 644-0391. MAC Shareware, Bikergif's, & CD-ROM Market Research.

Business Opportunities

Get Paid $268.20 per roll taking easy snapshots! No experience. Film supplied. Call (909) 659-9757 Ext. 44.

Rent 900 Lines or Joint Venture Opportunity. •MCI/approval required •2 Months Free! Call (310) 827-2253 or (310) 823-8572.

OK- you have a computer. Is it making you money? Our program will generate income for you month after month. Cash in on the Super Highway. For details, send $3.00 S&H to: NETWORX, Dept. 321, 1249 S. Diamond Bar Blvd., Diamond Bar, CA 91765

Make Big Money Stuffing Envelopes At Home. For information, send $4.00 and SASE to: Robert Wallace, P.O. Box 76763, Los Angeles, CA 90026

CD-ROM

CD-ROM Market Research. Who? What? Where? How Much? Call (818) 507-6125.

CUSTOM CD-ROM- Put your data on CD-ROM for backup, etc. Lowest prices. (714) 992-4439.

CD-ROM BACKUP SERVICE
Free up your hard disk!
Make your own CD-ROM for as little as $50. Portable tape drives available for rent.
CD-ROMS "R" US • (800) 280-5151

Cartridge Refill

Recycle Your Toner Cartridges
APPLE • CANON • HP • IBM
• Save 40% In Cartridge Costs
• Print Quality As Good As New
• Important Recycling Opportunity
• Fully Guaranteed
• Free Pick-Up And Delivery In Greater Los Angeles Area
$$$
(818) 305-0844 or (213) 624-0089
LAZER CARTRIDGE SERVICE
"Serving Los Angeles Since 1987"
We also buy empty cartridges

LASER CARTRIDGE RECYCLING
Recycled Toner Cartridges
Quality as good as new!
Printer Repair
SPECIAL
HP 4,HP 4M, and HP 4+ for $65.00
For Your: Canon, Panasonic, HP, Ricoh, Xerox, IBM, NEC, And all other laser printers, copiers & fax machines.
100% Guaranteed
Each Cartridge is disassembled, inspected, and all worn parts replaced. It is then refilled with a high-grade toner and tested for maximum performance.
FREE Pickup & Delivery
(We also Buy Empties)
Call Toll Free:
800-5-RECYCLE

CD - ROM

SPICOM MULTIMEDIA
IBM / MAC
♦ CD Rom Drives Int/Ext.
♦ Titles Largest Selection of New & Pre-owned Cd's, over 600.
♦ Convert your data and/or backups to CD Rom.
1640-A S La Cienega Bl
310 - 205 0712

CD-ROM DRIVES
Multimedia Kits
SCSI Adapters
Sound Boards
Large selection of compact disc software
Caddies • Accessories
COMPUTERS AT LARGE
Saratoga, CA
Dedicated to CD ROM Technology
Please Call for Our Price List
800-642-4194 408-255-1081
email address: cal@aimnet.com

Recordable CD's $10
TDK's in qties.CD74R(4x)*...$10.-each
NO BETTER PRICE AROUND
YAMAHA 4x w/CDgenW/contr$4,969
DOCUMENT IMAGING TOOLS
Document Scanning Services
FileServers.JukeBoxes.CD-Recorders
Digital Enterprise Services. (800) 881-1082 fax (714) 459- 2879
29881 Aventura, Suite E. RSM, CA 92688-VISA+MC+Amex
* Discs are guaranteed by TDK to qualify for YAMAHA 4x recorders.

Cartridge Refill

Recycle Your Toner Cartridges
APPLE • CANON • HP • IBM
• Save 40% In Cartridge Costs
• Print Quality As Good As New
• Important Recycling Opportunity
• Fully Guaranteed
• Free Pick-Up And Delivery In Greater Los Angeles Area
$$$
(818) 305-0844 or (213) 624-0089
LAZER CARTRIDGE SERVICE
"Serving Los Angeles Since 1987"
We also buy empty cartridges

LASER CARTRIDGE RECYCLING
Recycled Toner Cartridges
Quality as good as new!
Printer Repair
SPECIAL
HP 4,HP 4M, and HP 4+ for $65.00
For Your: Canon, Panasonic, HP, Ricoh, Xerox, IBM, NEC, And all other laser printers, copiers & fax machines.
100% Guaranteed
Each Cartridge is disassembled, inspected, and all worn parts replaced. It is then refilled with a high-grade toner and tested for maximum performance.
FREE Pickup & Delivery
(We also Buy Empties)
Call Toll Free:
800-5-RECYCLE

CD - ROM

FREE ADULT SOFTWARE
CALL NOW FOR YOUR FREE SAMPLER & CATALOG! YOU PAY ONLY THE SHIPPING - JUST FIVE DOLLARS!
EmpireSoft
10650 MTN. VIEW #405
REDLANDS CA 92373
Please state 211
ALWAYS OPEN!
909.799.7373
NO VOICE CALLS PLEASE

MICRO COM
Adult CDs
Space Sirens $49
Tokyo Nightlife $45
... and many more
Ext. CD-ROM & HDD
Notebook User
CD Notebook
PCMCIA Fax/Modem
Ext. 2.5" HD
(from 200 to 800MB)
(213) 627-1339
twu@netcom.com

Data Conversion

DATA CONVERSION- 9 Track main frame tapes converted to 5 1/4 ", 3 1/2" or QIC 80 tape (Conners 250 tapes) for PC users. Fields extracted, data bases created. Guaranteed lowest price. Call Lonnie Reed @ (800) 955-0969.

COMPUTER DISK & TAPE CONVERSIONS
Micros • Minis • Mainframes
Floppies, CD's, 1/2" & Cartridges
DATA CONVERSION SERVICES
(800) 327-0330

Data Recovery

DATA RECOVERY IN HOURS.
■ One-Day standard turnaround.
■ Over 10 years of experience with clients like NASA, Apple, & FedEx.
■ We've recovered more than half-a-million megabytes of lost data.
■ On-Site & Courier service available.
■ Successful recovery is guaranteed.
■ Call 24-hours a day.
LAZARUS DATA RECOVERY
800-341-DATA
Ask for the Lazarus Technical Data Recovery Guide
415-495-5556 FAX 415-495-5553 RESTRICTIONS MAY APPLY
321 Clementina Street • San Francisco, California 94103

Consulting

INTER-NET-WORKING
SEMINARS featuring "Learning By Example"
• The Internet: Getting Connected (2 days)
Doing business with a Global Perspective
• Implementing Client/Server (2 days)
Open Client/Server = "Open For Business"
• Data Comm & Networking - LANS to WANS (3 days)
Implement the latest cost-effective networking solutions.
Follows the OSI model with De-facto (TCP/IP) Implementations.
• Designing and Building GUI Applications (3 days)
Your applications can be intuitive, flexible and efficient.
Call Now for Course Outlines
(714) 859-8088
THE NETWORK NETWORK
CONNECTIONS TO THE FUTURE

NEED HELP?
The Computer Guy
✦ Friendly, knowledgeable and experienced assistance
✦ On site consulting and system repair.
✦ System sales, upgrades, repairs and more.
CALL: Ben Robinson (714) 751-5002

Capitalize on Your Experience... Increase Your Income...
Attend the One-Day Seminar...
HOW TO START & BUILD A PROFITABLE COMPUTER CONSULTING PRACTICE
FULL-TIME or PART-TIME
Sat. Feb. 25, Woodland Hills
Sat. Mar. 25, San Diego
Offered Monthly
(213) 321-9342
William Mooney Associates
The Center for Consulting & Professional Practices
19401 S. Vermont Ave., Ste. J-102D
Torrance, CA 90502

Desktop Publishing

FREE GRAPHICS! 1.4 Disk PCX Format. Send $.64 SASE to ASG, 16787 Beach Blvd. #733, Huntington Beach, CA 92647.

Data Recovery

DATA RECOVERY
Data returned "plug & play" on your drive
Success rate over 90% • Rapid turnaround
DISK DRIVE REPAIR & SALES
Disk Drive Technical Data and Formatting
Guide V.5 Now Available!
DRIVE SERVICE COMPANY
3303 Harbor Blvd. • Ste. E-7 • Costa Mesa • CA • 92626
714-549-3475 • Fax 714-549-9752
MasterCard and Visa Accepted

Classifieds

Data Recovery

DATA RECOVERY
MACINTOSH
• OS/2 • UNIX
• DOS • FLOPPY DISK
• NOVELL 286/386
• Recover your data even if it was refused from other company.
• Lastest technology
• Highest success rate
4448 INDUSTRIAL ST
SIMI VALLEY CA 93063
MICRO COM
TEL 805-582-9082
FAX 805-582-9102

Ontrack Data Recovery

The world leader in professional data recovery services!

- Expertise in DOS, Novell, Macintosh, OS/2, Unix, Xenix, DEC, Sun, Wang, Banyan Vines and more!
- Service available on DAT, tape backups, and removable media.
- Professional service authorized by Conner, Iomega, Maxtor, Micropolis, Quantum, Rodime, Seagate, and Western Digital.
- For fast, successful results call Ontrack!

Ontrack DATA RECOVERY
1-800-752-7557
714-263-9245
MN: 1-800-872-2599
UK: 44-81 974 5522
Germany: 0130-815-198
France: 05 90 72 42
Coming Soon...Ontrack Data Recovery in Japan!
2400 Main Street, Suite 200, Irvine, CA 92714

DATA RECOVERY
24 Hour Turnaround • Free Estimate
DATA-ONE
(408) 434-1002
940 Rincon Cir. San Jose
(HWY 880 & Montague)
9-5 Mon thru Fri

Data Recovery

DATA RECOVERY
MACINTOSH
• OS/2 • UNIX
• DOS • FLOPPY DISK
• NOVELL 286/386
• Recover your data even if it was refused from other company.
• Lastest technology
• Highest success rate
4448 INDUSTRIAL ST
SIMI VALLEY CA 93063
MICRO COM
TEL 805-582-9082
FAX 805-582-9102

Ontrack Data Recovery

The world leader in professional data recovery services!

- Expertise in DOS, Novell, Macintosh, OS/2, Unix, Xenix, DEC, Sun, Wang, Banyan Vines and more!
- Service available on DAT, tape backups, and removable media.
- Professional service authorized by Conner, Iomega, Maxtor, Micropolis, Quantum, Rodime, Seagate, and Western Digital.
- For fast, successful results call Ontrack!

Ontrack DATA RECOVERY
1-800-752-7557
714-263-9245
MN: 1-800-872-2599
UK: 44-81 974 5522
Germany: 0130-815-198
France: 05 90 72 42
Coming Soon...Ontrack Data Recovery in Japan!
2400 Main Street, Suite 200, Irvine, CA 92714

DATA RECOVERY
24 Hour Turnaround • Free Estimate
DATA-ONE
(408) 434-1002
940 Rincon Cir. San Jose
(HWY 880 & Montague)
9-5 Mon thru Fri

Employment Information

EMPLOYMENT OPPORTUNITIES

PC Club, an innovative computer retail operation, is looking to fill the following positions:

Customer Service Technician
Warehouse Assembly Technician

1 Year Experience Needed for Each Position
Full time, Salary DOE

Please fax resumes to
PC Club (818) 913-0123

From Novice to Pro in One Week. Professionals only. Day 1- Applications, Day 2- DOS/Windows, Day 3- Networking, Day 4- Internet, Day 5- Programming, $129 each or $495 for all. Hands-on and guaranteed effective. Includes job opportunities. Day, evening, and weekend classes. Call 800-76-INSTA.

Computer Consultant. Minimum 5 years in computers: Hardware/Software/Networking. Make extra income in your idle time providing tech support or on-site training/repair/programming. Opportunities in L.A., San Jose, Seattle, Phoenix and other Western U.S. cities! Call (800) 76-INSTA.

HELP WANTED- Full or Part Time. The Entertainment Technology Center needs experienced computer staff. Applicants should have Mac skills, and knowledge of Unix, Internet and Sun is a plus. Please send resume to: Entertainment Technology Center, USC School of Cinema-Television, Los Angeles, CA 90089-2211, or fax it to us at: (213) 740-7682. Attn: HollyNet Project.

Hardware

Truevision Targa+ 16/32 Video Capture Board $600; INTEL Satisfaxion Modem 400 & s/w $150. Call Matt @ (714) 751-9241.

Govt. Bid

MBE/WBE/DVBE
Sub-bid Request
to furnish Computer Hardware, Software, Services, Printing & Shipping State Wide Contract for RFP-DGS-4002
State MicroComputer Store
Qualified Interested Bidders call (916) 552-2350 for Contract Information
AmenData Technologies, Inc.

Hardware

Laptop- Toshiba T1000 w/768 card, plus other goodies. $150 o.b.o. Call (310) 865-5005.

Hardware

HEWLETT PACKARD Excellent prices on all types of HP Hardware. 90 day warranty on all equipment. We buy, sell, rent and repair HP products. Cal-Logic (818) 701-9005.

LAPTOP LOSING POWER? Have your power pack rebuilt with NEW cells at a 50% savings over the cost of a new pack! Increase your usage time with HIGH CAPACITY CELLS! Fully Guaranteed! Call the N-CAD Lady @ (909) 698-1901.

BUY – SELL – TRADE-IN
SIMM DRIVE MONITOR
*SIMM (5 YEARS WARRANTY)

30 PINS (70NS)			72 PINS (70NS)	
256Kx9	(3 chips)	$10	1M:256kx32/256kx36	$35/$36
1Mx9	(3 chips)	$34	2M:512kx32	$65/$69
4Mx9	(3chips)	$125	4M:1Mx32/1Mx36	$145/$155
1Mx8	(8 chips)	$32	8M:2Mx32/2Mx36	$279/$299
4Mx8	(8 chips)	$116	16M:4Mx32/4Mx36	$429/$489

*HARDDRIVE: 1GB $409; 540MB $195; 420MB $175
*MONITOR: Multiscan Monitor 17", .26, Non-Inter., 1280x1024 $489
INSTALLATION: SIMM $5, HARDDRIVE $20
LINK-TRONICS
2610 Westminster Ave. #C
Santa Ana, CA 92706
Tel (714) 554-8677 · Fax 554-8122 · M-F 10 to 6

120 W STEREO AMPLIFIER
for MULTIMEDIA

$475
unique
Tel: (310) 273-2934
Fax: (310) 273-1486
internal
external
rack-mount
models
LOGOSOL electronic engineering

WE BUY MEMORY
SIMM - SIPP - DIP - ZIP - SOJ
We'll BUY/TRADE all types
>NEW >OLD >UNSURE
Call (714) 540-5137
FAX List etc. (714) 540-5139

WIZARD COMPUTER/ELECTRONICS

386 WIZARD
25 Mhz
INCLUDES:
*Game Wizard
*Monitor, KB, Mse
*Software Installed
As Low As $699

486 WIZARD
50 Mhz
INCLUDES:
*Game Wizard
*Monitor, KB, Mse
*Software Installed
As Low As $799

THE ONLY COMPUTERS THAT STORE GAMES ... FOREVER!
COMPLETE SEGA AND SuperNintendo
COPY SYSTEMS
Game Wizard
ONLY $299
(Sold Separately)
• Easy to Install
• Works on All PC's
IF IT'S NOT A WIZARD .....
THERE'S NO MAGIC!
1-800-GAMELORD (1-800-426-3567)

Hardware

SYSTEMBOARD
- green PC power management
- support CPU 25/33/40/50/66/75/100
- 3 VL & 4 ISA slots
$85 without CPU 256K cache
$105 with 486SX-33 CPU 0K cache
(310)949-0499

CASH PAID
We buy 1MB, 4MB, 8MB, 16MB SIMM.
All DRAM, Intel 486DX.
Call Day or Night at:
(310)929-7439 or (714) 530-5666
Pager: (714) 804-1599

MEMORY
BUY AND SELL
SIMM • DIP • SOJ • ZIP
Guaranteed Lowest Prices
Upgrades for Desktops, Laptops, Laser Printers, from Apple to Zenith
LET US DO YOUR SIMM MODULE ASSEMBLY
ERITECH INTERNATIONAL
TEL: (818)244-6242
FAX: (818)502-5059

IBM 16MHZ, VGA Monitor, lots of software (disks incl.) $200. Call (714) 539-2893.

TIRED EYES? Use the only 17" monitor that really refreshes! 80HZ @ 1280x1024, the choice of five magazines, #1 IN JAPAN, 3 year warranty, IDEK Visionmaster 8617, highest performance, LOWEST PRICE, factory authorized dealer, 15 and 21" also available, Call (619) 481-6787.

Complete computer system, 5.25 disk drive, color monitor and keyboard with mouse. Call (714) 542-7822.

Hardware Wanted

Non-profit organization will trade income tax deduction for IBM type computers & printers. Call Rev. Stevens @ (213) 664-6422.

Non-profit elementary school needs your tax deductible donation of IBM compatible computers. Call Joe Ortiz @ (310) 616-3822.

Wanted: Vinyl cutter 13" or larger capacity, also Mac vinyl cutter software, CASmate Pro Flexisign etc. older version OK. Call (310) 793-0129.

Give me a computer, and I will remember you when I'm rich and famous. Call (310) 434-4325.

Hardware Wanted

Orange County Schools bankrupt! donate your 386, laserprinter, vcr, or video camera. Tax deductible. Call Mr. Young @ (714) 663-7424.

MAC II, 5/100, Apple 13-inch monitor, $525, Mac Plus, 2.5/20, $225. Call (714) 738-3505.

American Cancer Fund for Children needs two computer systems for office. 501(c)(3). Please telephone (818) 895-1025.

Instruction

Internet Class- In 3 hours, you could be surfin'. Class locations: SFV/Burbank/Pasadena. 40 page reference book included. Only $49! Call (818) 951-4367.

Internet

Add Internet to your Business. Mosaic Publishing, On-line Catalogs, E-mail, FTP, Gopher Services. Content Development/Conversion. FutureMedia Services (714) 771-9552.

WEB PUBLISHING: We design and publish your color pages on the Internet. Catalogs, magazines, advertising. Millions of users. 2 Way Systems. (909) 338-7040.

Get connected to the Internet and connect to the World

Network Intensive
A Complete Internet Solution
800-273-5600
Email info@ni.net
Web Server: www.compute.com
Dial-up, ISDN, Frame Relay, T1

LAN

PC & Networking Service- Sales, Repairs & Installations. Call: RC Computer Service @ (714) 858-5608.

Classifieds

Multimedia

Attention Dealers:

GET TOTALLY WIRED

With TTS Mutimedia Systems Audio Cables experience the full impact of Multimedia CD Audio.

- **Cables to connect** any CD ROM drive to any Sound Card
- MIDI expansion kits
- **Attach External CD Drives** to Internal Sound Cards with the new ES/1 kit.

TTS uses only the highest quality double shielded, no noise wire, AMP and Molex connnectors and eye appealing shink tube reinforcement. Other specially molded cables available for resale.

Call us before your customers do!

multimedia TTS systems

2045 San Elijo Avenue
Cardiff, CA 92007

Dealer Support
619•942•5391

EndUser Support
800•887•4748

FAX: 619•632•9957

Multimedia

Your Mac Broke Down?
Need Repair/Upgrade?

Call
(800) 622-7977
(408) 747-1555
Fax (408) 747-1110

We will BEAT any competitive price

Motherboard repair as low as	$75.00
Power supply repair as low as	$45.00
800K/1.4M Floppy drives	$59/$75
Powerbook repair specialist	CALL!!
LaserWriter	CALL!!

24 HOUR SERVICE TURNAROUND
LONGER WARRANTY/FREE DIAGNOSTIC

DT&T

586 Weddell Dr. Suite 1, Sunnyvale, CA 94089

Multimedia

ARCHIVE YOUR DATA TO CD FOR ONLY $79

- 660MB CAPACITY
- MAC HFS OR ISO 9660 FORMATS
- HYBRID CDS
- MIXED MODE OR AUDIO ONLY
- SAME DAY TURNAROUND
- BEST PRICES ON BLANK 74' MEDIA

We offer complete CD-ROM manufacturing: mastering, insert printing, CD package design & fulfillment!! Professional service from California's most experienced CD-ROM bureau!

ACUTRACK SOFTWARE DUPLICATION
tel: (510) 278-5441 • fax: (510) 275-9820 • email: acutrack@aol.com
16592 Rolando Avenue, San Leandro, CA 94578

Repairs

Starcom VIII

Full Service Computer Repair Center

IBM AND COMPATIBLES

Monitors.....

- VGA & Super VGA repair: $40.00 flat rate!

Give us 10 or more, and pay only $35.00 per monitor.

- Mono repair : $35.00 flat rate!

Give us 10 or more, and pay only $30.00 per monitor.

.....And More!

- PS-2 Power Supply Repair: $15.00
- HP Laser Printers Repair: $65.00
- Printer Repair: $45.00
- Floppy Drive Repair: $15.00
- Motherboards Repair: $60.00

Starcom VIII
3116 Bellevue Ave., LA 90026
(213) 413-0372

90 Day Warranty on all Repairs Expect Expert Service As Well As Great Prices

Services

DATABASE
Custom Programming

- High Quality Development
- Very Reasonable Rates
- Free Initial Consultation
- All Applications Network Ready
- Accting, Financial, Inventory, etc
- Dos/Windows/Macintosh

Specializing in Fox Pro development
DataVision 310-430-3857

Miscellaneous

VIDEO How to assemble your own computer from concept to completion. 286-586 systems. $19.95 plus $3.00 P&H. (818) 348-0950.

Downey Amateur Radio Club Meets First Thursday of the Month @ 7:30 pm. S. Middle School, 12500 S. Birchdale Ave. W60LZ. (714) 636-9840.

Free!!! MS-DOS formatting guide. Send $1.00 S&H to Matt Stansfield, 985 Victoria, Costa Mesa, CA 92627.

FANTASTIC repeating income for computer-users! Absolutely no selling involved! Most brilliant system EVER created. Low investment. Send $.52 self-addressed stamped envelope to: FSLC, 4067 Hardwick, Suite 249, Lakewood, CA 90712.

HEALTH INSURANCE- Blue Cross, Blue Shield, Foundation Health, major companies. High deductible catastrophic plans at VERY low cost. Instant coverage. FREE INFORMATION PACKAGE. (800) 587-0431.

Optical Scanning

Scan Images for Your P.C. B/W - GRAYSCALE - COLOR. GIF/JPEG/TIFF/BMP/PCX. PHOTOS - ARTWORK - DRAWINGS. 81/2" X 14" TO 1200 DPI. Free Viewer with Order. Reasonable - Guaranteed. For More Information: AME IMAGING, 22431-B Antonio Pkwy #611, RSM, CA 92688. Voice: (714) 858-4390, Email: ameimage@aol.com.

Personals

ADULTS! "The BEST for LESS" 49 cents per/min. Talk to, date hot local women tonight. Fantasies fulfilled! (408) 345-7051.

ADULTS ONLY! X, XXX Graphics & Animation, 30,000+ Titles, Free PC Disk w/viewer & listings. Send $3.00 S&H to: IMP Concepts, Box 80764, RSM, CA 92688.

CHRISTIAN SINGLES- Meet Christian singles. Color pictures (optional). Additional features: list cars & homes for sale. (714) 375-0400.

Programming

Overseas Prog./Data Entry. Save money - quick turnaround! VB, C++, Access, Custom Data Entry: all inquiries welcome. Local LA office: (310) 424-7705.

CUSTOM PROGRAMMING
Top Experts
Low Rates
DOS, WINDOWS
Visual BASIC
Visual C++
Access, FoxPro etc.
All Platforms, Tools, Apps.
Please Call
Software A to Z Inc.
800-500-0625
(408) 263-0625
Satisfaction Guaranteed

Repairs

14" Monitor Repair. $50 flat rate (parts and Labor) excludes flyback & CRT. Guaranteed for 90 days. (310) 863-6621 First Electrotech. 10948 Imperial Hwy #102, Norwalk, CA 90650.

Repairs

UniTek Co.
Hard Disc Services
Specializing in repair of PRIAM
CONNER, MAXTOR, SEAGATE Hard Drives
From 85¢ per MB
(408) 263-9994

Routine preventative maintenance of your PC system & more. Play it safe with **On-Time Services.** For details, call (310) 348-1360.

HEWLETT PACKARD Laserjets, Deskjets, PaintJets, Vectras and other HP equipment. Experienced, quality service. On-site service available. Cal-Logic 18707 Parthenia St. #3, Northridge, CA 91324. (818) 701-9005.

Monitor Repair Center. Free estimates; $45 flat rate (in most cases). 1 day turnaround, 90 day warranty. Call ATV Tronics Center at: 1 (800) 873-5555.

MONITOR REPAIR- $50-$75 for most color repairs. Drop off in Irvine or Anaheim. COMPUTER MONITOR SERVICE, 3121-F East LaPalma, Anaheim, (714) 632-1844.

Services

DISK DUPLICATION OEM CERTIFIED! 24 HOUR TURNAROUND! LOWEST PRICE! CUSTOM LABELS / MANUAL! PACKAGING! SHRINK-WRAPPING. Acutrack (510) 278-5441. Fax (510) 278-9820.

ENCORE tech
Business Computing & Network Services

NOVELL.

NOVELL AUTHORIZED RESELLER

- CNE on Board to Serve You
- Netware Installation & Upgrade
- FOXPRO Programming
- UNIX/TCPIP Administration
- SBT Accounting

Tel: (909) 468-0060
Fax: (909) 468-0077

SOFTWARE DUPLICATION

Duplication from $0.32 (3.5"DD),and $0.37(3.5"HD)

CONTINUED ORDERS MEAN LOWER PRICES!!

- Highest Quality Media
- Duplication 100% Guaranteed
- 24 Hour Turnaround
- Custom Labels
- Packaging and Assembling

COMPTREE DUPLICATION, INC. TEL: 818-330-5191 FAX:818-330-4291

Need Help? Then Call IBM & Mac Experts. Networking, Data Recovery, Installation, Troubleshooting, Sales & much more. Home or Office. Satisfaction Guaranteed. NCC (818) 385-0917.

PC & network, hardware & software specialists. We can solve your computing blues at your office/home or our office. Knowledge in DOS, Windows, Novell, etc. Free on-site evaluation. Call: (818) 304-2634.

Macintosh Training. Effective, personal. QuarkXpress, Photoshop, PageMaker, Freehand, Illustrator, Word, Excel, ClarisWorks. Call Orchid Graphics @ (800) 899-9818.

COMPLETE SERVICE for your PC's and NETWORKS. Over 10 years in business repairing, maintaining and installing computers and networks. On demand and monthly service contracts available. Call LTD Computer Solutions - (800) 275-4583.

FOR HIRE...Typist--2,500 WPM

NEW! CD-ROM OUTPUT!

Why buy expensive hardware and software? Use our cost-effective quality service.

Any Printed Material Into Any IBM or Mac Program...FAST!

1-800-300-SCAN
Same Day Service

SCAN TYPE®
Scanning/OCR Services

Classifieds

Services

Attn: Colorado* Users!

Are you using tape for extra storage?
Put your "backups" back on-line.
Get instant access to your archives.

SCAN TYPE®
"Services for Electronic Publishers"
1-800-300-SCAN
*Most tape drives supported. Call for list.

TAPE to CD-ROM
$49.00**
**Single QIC-80 tape. Add'l tapes $15.00 each. Shipping & Tax extra
Up to 650 MBytes/CD.
Complete directory structure.

PERSONAL COMPUTER SERVICES in your home or office. Upgrades, installation, graphics, training. Call BILBREY & ASSOCIATES: (310) 941-3864.

SOFTWARE SOLUTIONS for your business. Programming and help to improve your efficiency. Windows & DOS. Databases, C/C++, VB, Clipper, etc. Call (310) 204-4703.

INTERNET E MAIL AND NEWSGROUPS
Domain Name Service and MX
Connections UUCP Accounts
All Aspects of Mailing List Creation and Management
UUCP accounts permit multiple user addresses
Perfect for BBS's
$15/MONTH $25 REGISTRATION AND SETUP FEE
DPC SYSTEMS MONROVIA, CA 91016
E-Mail connect@dpcsys.com
PH 818-305-5733 FAX 818-305-5735

Don't Delay, Do it Today!!!
DUPLICATION
CD-ROM

IBM OS/2
MACINTOSH • APPLE
COMMODORE • UNIX
No Minimums!!! Custom Printed
Tyvek Sleeves & Labels
Optical Text Scanning
I.D. DISK CO. (818) 882-6454
NATIONWIDE 1-800-882-6454

LOW VOLUME CD-R DUPLICATION

CD PREMASTERING
• ISO 9660 • Unix
• Mac HFS • Hybrid

CD DUPLICATION
• 1-100 Units
• Bit-by-bit Verify

CD PACKAGING
• Jewel Cases • CD Packaging
• Mailers/Envelopes

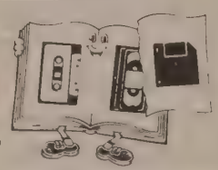
FSI FUTURE SOLUTIONS, INC.
800-388-8735
714-250-1133
17921-E Skypark Cir.
Irvine, CA 92714

SCANtastic Images TEXT & photo scanning service. Why retype that long script or article when I will scan it for just $.60 a page. Can convert to most word processing formats or straight ASCII text. Can also scan your photos to a computer image for Windows or DOS. Display software for PCs included. Color photos $6.00 and B&W $4.00 each plus $1.50 S&H. Call (310) 823-3391 for details or mail text/photos to: SCANtastic Images, 8180 Manitoba St., Ste. #206, Playa Del Rey, CA 90293. Note: Originals will be returned with diskettes containing scanned duplicates.

FREE CONSULTATION. We offer low reasonable rates on Consulting, System Design, Networking, Sales and Service. On-site monthly maintenance also available. Unicorn System Services (714) 858-9332.

EXPERT COMPUTER TUTORS will help you learn any WINDOWS or **MACINTOSH** programs at your home or office. Reasonable rates, fully guaranteed. Call Don Roark, Mgr @ (310) 821-6184.

WHEN SELECTING A DUPLICATOR TAKE A PAGE FROM OUR BOOK...



Diskette, Audio & Video Duplication
Complete assembly and packaging services available with duplication
Proudly serving the Training, Educational and Publishing industries since 1971
TAPETTE CORPORATION
5 Whatney • Irvine, CA. 92718
Phone (714) 588-7000 • FAX (714) 859-7801

CATALINA TECHNOLOGY
FULL SERVICE COMPUTER SALES, SERVICE & REPAIR
ALL COMPATIBLES!
SPECIALIZING IN HARD DISK REPAIR
• 2 to 5 Day Turnaround • Full Warranty On Repair
WE SELL NEW & RECONDITIONED PRODUCTS!
(714) 434-9144
3422 L West MacArthur Blvd.
Santa Ana, CA 92704

COMPUTER ACCESSORIES
Great Prices!
Computer Accessories, Toner, Ribbons, etc. for HP, IBM, 3M, Xerox & More
NEXT DAY DELIVERY - FREE FREIGHT!
Harvard Business Products
1-800-332-4046

SOFTWARE DUPLICATION
Serving all of Southern California & the U.S.A. since 1980!
•3.5"-5.25" Diskette Duplication
•2 Pass Verification
•CD-ROM/D.A.T. Tapes
•Generic/Custom Packaging
•Label/Shrink Wrapping
•Complete Fulfillment
FSI FUTURE SOLUTIONS, INC.
17921EF SkyPark Circle
Irvine, CA 92714
1-800-FUTURE-5
(714) 250-1133

GUARANTEED SATISFACTION OR DON'T PAY! Custom Windows, DOS, Unix applications and training. Hardware/software installation. Call Linas for free consultation. (714) 846-0775.

NEED A NERD? Consulting for Networks, Windows, DOS, Database, Accounting, Desktop Publishing, Communications, Private Instruction, Repairs, Upgrades, Sales, Home or Office. (714) 453-9631. SPECTRUM NETWORKS 10 years experience. CNE.

BULLETIN BOARD SYSTEM SETUP and MAINTENANCE. Your equipment or ours. Offer your customers/employees instant access to the online world through your own gateway. Internet connectivity. Many options available. Let's talk! DELTRONIX ENTERPRISES (714) 380-8969.

LOW LOW "LONG DISTANCE" RATES. Overall lower than AT&T, MCI, SPRINT. Also, voice mail and 1-800 service. Free Information. Call (800) 445-9010.

Software

SOFTWAREHOUSE
A "No Frills" Software Store
The ugliest software store you've ever seen, but the best prices anywhere

Some of This Month's Specials

	Competitors Price	Our Price
Police Quest 4	$49.99	$29.95
Microsoft Dos 6.22 Upgrade	$49.95	$29.95
Microsoft Word 6.0 for Windows	$299.99	$229.95
Falcon 3.0	$49.99	$29.95
Hell Cab CD-Rom	$49.95	$29.95
Math Blaster Plus	$39.99	$29.95
Act 2.0	$199.99	$149.95
Microsoft Access 2.0	$299.99	$199.95
Bitstream Fonts For WordPerfect	$69.99	$10.00
F117A Stealth Fighter for MAC	$49.99	$29.95
STACKER for MAC	$89.99	$49.95
Kids Educational Programs	Starting at $14.95	
MACINTOSH CD-ROMS	Starting at $5.95	
ADULTS ONLY CD-ROMS	Starting at $14.95	

OPEN 7 DAYS A WEEK
While Supplies Last Hurry, Hurry, Hurry!!
1000's of other software titles at unheard of Prices Starting at $1.00
Mon-Fri 10 TO 8 SAT & SUN 10 TO 6
Softwarehouse
17850 Newhope st. #102 Fountain Valley, CA 92708
(714)434-4797 Fax (714)434-4799

Super Savings Coupon
20% off Any Software
up to $50 off Total Purchase
Not valid with any other offer Expires 3-10-95 One per Family

Classifieds

Services

Boost Sales Now!!! We are a management team with years of successful Fortune 500 experience in sales & marketing management, and we want to help you market your product or service. Call The Action Group @ (800) 350-0047.

Software

CREATE A PRESENCE: Home Pages on the Internet for reasonable cost. Call John @ (213) 388-6921.

Novell Netware 3,12 Original complete. 1 set student study guide. Sale- $99.00 only. Please call (213) 463-7652. Ask for Rahman.

COOK IT! Complete PC Cookery Companion, 1000+ Authentically Delicious Recipes, Free! Send $5.95 S&H to: IMP Concepts, Box 80764, RSM, CA 92688.

Looking for any kind of business software? 10,000 to 12,000 titles in CD. Call (310) 806-8233.

MANUFACTURING SOFTWARE: Are you sitting on the fence? Knowing you have to TIME your inventory usage. We sell and support fully integrated MRP-Accounting Software. (702) 885-9125.

Memorize•It for Mac or Windows. Electronic/printed flashcards using pictures, drawings, text and sound. $49 Free catalog. Call (714) 952-4114; FAX (714) 995-6725.

Software

WE BUY SOFTWARE
All Types and Quantities.
CASH PAID!
Call (714) 219-0539

Juris Accounting Software, version 2.41. General Ledger, Accounts Payable and Payroll modules. License transferable. Includes all manuals, disks and updates. Original price $5,000.00, asking $1,000.00 obo. Call: (310) 552-3388, ask for Lee Schwing.

Software

Free Computer Disks
167 BUSINESS & FINANCIAL REPORTS
Copy and market this disk for up to $49 each. Includes copy of report entitled..."HOW TO MAKE $100,000 IN 100 DAYS." To order, send $15 one-time Registration Fee, shipping & handling.
Ron Patton Associates
3848 Overland Ave., Suite #115, Culver City, CA 90232

Software Wanted

Wanted: Manual for Hewlett Packard Think Jet Printer, MOD 2225C, Original Xerox Copy. (818) 767-9984.

Training

NOVELL NETWORKS & PC TRAINING
- Instructor led, Hands-on classes
- CNA, CNE, ECNE, PC Certificate Programs
- DOS, Excel, FoxPro, Word, NT, Power Point, Visual Basic
- Self study guides, Videos, CBTs also available
- Experienced, Degreed, Certified Instructors
- Day, Evening, Weekend sessions

Training Locations: Irvine, Fresno, San Jose, San Diego
HiTek Solutions Inc. (714) 474-8270

Training

satisfying your computer needs
MICROTIMES

•••NOTICE•••
ACP's 66th GIANT
COMPUTER SWAP MEET
Sunday
Mar. 26th, 8-2
Orange County's Original!
FREE Admission and Parking
100's of Sellers 'n Deals
in the Huge Parking Lot
Advanced Computer Products, Inc.
ACP SUPER STORE
Since 1976
1310 E. Edinger
Santa Ana • 714-558-8813
Some Dealer Space Still Available...Call Mary

ARE YOU TRIPPED

UP BY COMPUTER LANGUAGE?

READ MICROTIMES AND GET A GRIP.

MICROTIMES

Find the Right Person for the Right Job

Attention HR Directors & Recruitment Managers:

MicroTimes' CAREER MARKETPLACE is the place to reach qualified candidates for your job search. MicroTimes Magazine reaches highly qualified professionals with a monthly circulation of 230,000 in the Bay Area and greater Los Angeles area.

For more information or to reserve your space, call MicroTimes Classifieds
(213) 851-8600 fax: (213) 851-8303

MicroByte Computers

1265 Manassero Street, #306 • Anaheim, CA 92807
Tel (714) 970-0543 • Fax (714) 970-0928

Your Ultimate Choice for Multimedia
Over 1500 CD-Titles in Stock

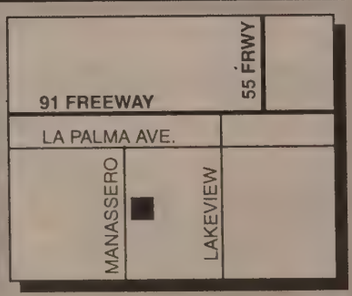
101: Only the Best Games Vol. 1	10	Lion King	30
101: Only the Best Games Vol. 2	10	Lords of Ring	20
7th Guest	17	MacMillan Dictionary for Children	15
AAA Triple Planner	17	Mad Dog McCree I	14
Aces of Europe	19	Mad Dog McCree II (Box	17
Aces of Pacific	19	Magicians Cards	18
Aegis Guardian	23	Man Enough	16
Alien Logic	18	Mathematics Library	15
Aladdin	30	Mayo Clinic MPC	16
American Talking Dic.	17	Mayo Clinic Pharmacist	19
Armenth	17	Mayo Clinic Total Heart	16
Arthur's Teacher Trouble	13	MS: Ancient Lands	Call
Beneath the Steel Sky	25	MS: Baseball	Call
Betrayal of Kondors	20	MS: Book Shelf 94	Call
Bible Library	19	MS: Cinemania	Call
Blood Net	24	MS: Dangerous Creatures	Call
Blue Force	18	MS: Dinosaurs	Call
Carmen SanDiego	15	MS: Encarta 1995	Call
Civilization	20	MS: Golf	Call
Clip Card Cornucopia	16	MS: Money 1994	Call
Clipart Warehouse	12	MS: Musical Instrument	Call
Comanche	25	MS: Office Professional	Call
Comptons Encyclopedia 95	20	MS: Works	Call
Comptons Family Choice	15	Myst Box	40
Comptons Home Collection	17	National Parks DOS	10
Corridor 7	19	New Kid Edutainment	12
Critical Path	16	Nick Faldo Golf	16
Cyclones	19	Outpost	22
Dark Legion	21	Penzar General	19
Dark Seed	15	Police Quest IV	19
Dark Sun	19	Power Rangers	16
Dinosaurs Encyclopedia	14	Psychotron	18
Dinosaurs Safari	10	Putt Putt Goes to Moon	19
Dog Fight	24	Quantum Gate	16
Doom II	38	Quick & Easy Spanish	18
Doom: Companion	13	Raven Lost	20
Dracula Unleashed	21	Rebel Assault	26
Dragon Liars	21	Return to Zork	15
Dr. Book of Home Remedy	16	Reunion	22
Family Doctor	14	Shadow Caster	29
Great Naval	19	Sim City 2000	18
Grolier 1995	20	Star Crusader	21
Hell Cab	22	Star Trek 25th Anv.	23
INCA II	19	Syndicate Plus	27
Indiana Jones	17	TFX	28
Infopedia	19	Trump Castle	14
Iron Helix	16	Tune Land	20
Journeyman Project Turbo	16	Virtual Vegas Vol. 1	20
Jurasic Dinosaurs	12	Who Killed Sam Ruppert	13
Just Grandma & Me	13	Who Shot Johnny Rock	18
Lands of Lore	20	Wiggins Story Land	19
Leisure Suit Larry	22	X-Com	24

SOUND CARDS

Sound Blaster MCD-16	$85.00
Sound Blaster 16 SCSI	$137.00
Sound Blaster AWE32	$270.00

CD-ROM

Mitsumi 4xI	$195.00
Teac 4xI	$199.00
Funai 2xI	$105.00
Toshiba 4xI SCSI	$299.00



MULTIMEDIA UPGRADE KIT

Double Speed CD-ROM, SB-16 Sound Card, Speakers, and Bundle of CD's	$199.00
4x Speed CD-ROM, SB-16 Sound Card, Speakers, and Bundle of CD's	$299.00

Sound Blaster Discovery CD-16	**$235.00**
Sound Blaster Digital School	**$249.00**

NOT RESPONSIBLE FOR ANY TYPING ERRORS.

Fantasies *continued*

continued from page 30

ommendations);

• Case law (precedents set by courts, interpreting the meanings of laws that are often left intentionally ambiguous by Congress-volks with inadequate backbones; judicial-branch records, but nonetheless essential for understanding government);

• Legislators' Washington and district-office phone and fax numbers, and snail-mail and electronic-mail addresses (those hiding their Washington fax numbers—except, of course, from donors and "important" people—aren't *our* representatives);

• Same information for legislative staff, plus descriptions of their areas of expertise and current assignments—easily updated when it's online (related professional *vitae* would also help);

• Names and addresses of all registered lobbyists and their disclosed clients, legislative interests, fees received, and "contributions" channeled;

• *Timely* and *complete* campaign-finance disclosures and financial-interest statements (already available online from the FEC—Federal Elections Commission—but only for a fee and after some rekeying delay; significant disclosures should be required to be submitted to the FEC in computerized form in the first place);

• Legislators' interest areas and personal backgrounds;

• Descriptions and tutorials about each committee and its jurisdiction;

• Overview of how Congress works in principle; and

• Practical tutorials about how Congress *really* functions, as would be needed by new legislators and lobbyists

—among other things. Anything less *ain't* adequate public access.

This must be available in standard, nonproprietary forms—computer text, publication-quality text, financial spreadsheets, database datafiles, graphs, photos, motion video, satellite images, maps, etc.—or include freeware to handle nonstandard formats.

Anything less—or less timely—is merely inadequate pretense of public access.

And of course, we want it all *now.*

• "Free" (Tax Prepaid)

This information already exists, often already computerized—at taxpayer expense for government use.

The cost per item, per computer-using-citizen, of making it available via the public computer nets is nano-pennies—much less than it would cost to bill for and collect at-cost user fees.

Furthermore, it is essential for an informed public, and any fees would deter citizen access.

Thus, access should be without government fees.

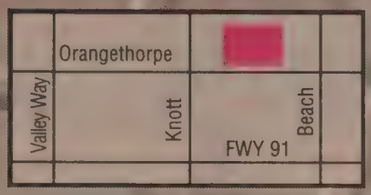
Additionally, such public information should be declared to be in the public domain, permitting unlimited copying, redistribution, and reuse by citizens, nonprofit groups, and for-profit users. This mirrors the executive-branch policy, declared in June 1993 in the Office of Management and Budget's Circular A-130.

This encourages public-service groups and tax-generating entrepreneurs to add value, creating additional analyses, cross-references, indices, printed copies, faxed summaries, automated notifications, and so on—things that government agencies couldn't do and shouldn't do.

Newt talks the talk. Will he walk the walk? ■

Copyright © 1995 by Jim Warren; email/jwarren@well.com; 345 Swett Rd., Woodside, CA 94062. Permission herewith granted to copy-in-full including this notice, for any nonprofit use.

NET COMPUTER



NET

CALL US AT:

(714) 523-2367

FAX: (714) 523-2625

7033 Orangethorpe Ave.,
Unit A, Buena Park, CA 90621

Hours:

Monday-Friday	Saturday	Sunday & Holidays
10:00am-6:00pm	By Appointment Only	Closed

486 DX2 66MHz
VESA Local Bus System

* 4MB RAM, 70ns
  3 VESA local bus slots
* 256K Cache
* 1.44MB floppy drive
* 420MB IDE hard drive
* fast 32bit VESA local bus SVGA card with S3 chipset
  1MB, 16 million colors
* fast 32bit VESA local bus Enhanced IDE controller
* 14" SVGA monitor with .28 dot pitch
* 2 serial/1 parallel/1 game ports
* minitower
* 101 enhanced keyboard

Regular $1075 — CASH $999

INTEL PENTIUM
PCI Local Bus System

* 8MB RAM, 70ns
  3 PCI local bus slots
* 256K Cache
* 1.44MB floppy drive
* 420MB IDE hard drive
* Diamond Stealth 64 PCI SVGA card with 1MB
* fast 32bit PCI local bus IDE controller
* 15" SVGA monitor with .28 dot pitch
* 2 serial/1 parallel/1 game ports
* minitower
* 101 enhanced keyboard

	Regular	CASH
Pentium 60MHz	$1725	$1650
Pentium 66MHz	$1825	$1750
Pentium 90MHz	$2075	$1999

(90MHz M/B is made by INTEL)

486DX2/66MHz

Motherboard, 256K Cache,
VESA Local Bus, Zif Socket
DX4 Ready, Green

$280

VEGA SERIES

486DX2/66MHz Motherboard,
256K Cache VESA Local Bus, Zif Socket
5 Year Warranty U.S. Made

$320

WESTERN DIGITAL

1GB Enhanced IDE Hard Drive

$400

TEAC

4X CD-ROM Drive

CREATIVE

CREATIVE LABS, INC.

Sound Blaster 16
w/ Multimedia Stereo Speakers

$330

FINANCING AVAILABLE

VISA MasterCard DISCOVER

ALL SYSTEMS CARRY FULL 1 YEAR PARTS & LABOR WARRANTY!

PC CLUB

LOWEST PRICES

WHOLESALE – OPEN TO THE PUBLIC

MEMORY SPECIAL

30 Pin SIMM

1MBx3-70 .....CALL
4MBx9-70.....CALL

72 Pin SIMM

1x36 (4MB) ...CALL
2x36 (8MB) ..CALL

Macintosh Memory Available

MANAGER'S SPECIAL

486DX2-66 CPU & MOTHERBOARD

- 486DX4-100 Ready
- ZIF Socket
- 30/72 Pin
- 3VLB Slots
- 128K Cache
- Fan

$199

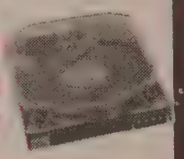
PENTIUM/CPU SPECIALS 'BEST BUY'

Pentium 90 MHz	$599
486DX2-66 Intel	$189
486DX4-100 Intel	$399
486DX-66 AMD	$159
486DX2-80 AMD	$199
486DX4-100 AMD	$259
486DX2-66 Cyrix/IBM	$139
486DX2-50 IBM Blue Lightning	$99

IDE HARD DRIVES

CONNER, MAXTOR, WESTERN DIGITAL, QUANTUM, HP & MICROPOLIS

1 GIG	$399
540 MB	$209
420 MB	$175



486DX4-100 SYSTEM SPECIAL

- 3 VLB Slots
- 256K Cache
- 8MB RAM
- Medium Tower w/230W PS
- 1.2 & 1.44 Floppy Drives
- Local Bus 1MB Video
- 2 High Speed Serial Ports
- 1 High Speed Bidirectional Parallel Port
- 540 MB Hard Drive IDE
- 101 Keyboard
- Monitor not included

$999

GRAPHICS ACCELERATOR

- VESA Local Bus
- Trident 9440 Chipset
- 1280 x 1024
- 1MB Upgradable to 2MB

$75

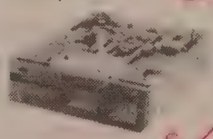
PCI GRAPHICS ACCELERATOR

- S3 864 Chipset
- 64 Bit
- 1280 x 1024
- 2MB

$175

TEAC FLOPPY DRIVES

- 1.44MB, 3.5" **$33**



- 1.2MB, 5.25" **$43**

FAX MODEM

- V.42
- MNP5 w/16550 UART Chip
- 4-in-1 WinFax

14.4 Int	$59
14.4 Ext	$99
28.8 Int	$169
28.8 Ext	$189
Auto Voice Fax Data Modem 14.4 Int.	$89

IDE/IO

- 2S/1P/1G **$12**

VLB IDE/IO

- 2S/1P/1G **$25**

ENHANCED VLB IDE/IO

- 4HDD, 4FDD
- On Board BIOS
- Supports 540 + Hard Drives

$55

486 VLB 66-MHz SYSTEM

- **486DX4-100 Ready**
- 486DX2-66
- 3 VESA Local Bus Slots
- 256K Cache
- 4MB Ram
- Mini Tower w/230 W PS
- 1.2 & 1.44 Floppy Drive
- Local Bus SVGA w/16M Colors
- Local Bus IDE Controller
- 2S/1P/1G
- 101 Keyboard
- 420 MB Hard Drive
- Monitor not included

$889

intel inside

PENTIUM PCI 90 MHz Motherboard

- 4PCI
- Up to 128MB
- 256K Cache up to 512K
- 2 High Speed Serial Ports
- 1High Speed Bi-Directional Parallel Port

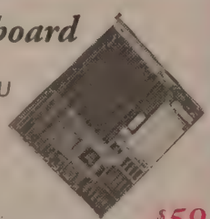
$249

- CPU Not Included

486SLC Motherboard

- Includes CPU
- 6 Slots
- AMI BIOS

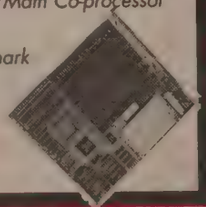
33MHz..... $59



486DLC-40 Motherboard

- Includes CPU/Math Co-processor
- 128K Cache
- 129.77 Landmark Performance

$109

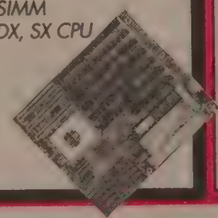


486 VLB GREEN Motherboard

- 256K Cache
- 30 Pin/72 Pin SIMM
- 486 DX4, DX2, DX, SX CPU
- ZIF Socket
- 3 VLB Slots

$99

- CPU Not Included



Pentium 90 Motherboard

- 4 PCI
- Up to 512MB
- 256K Cache to 1MB

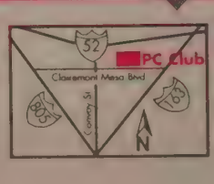
$169

- CPU Not Included

PC CLUB

Hours:
Mon-Fri 10:00-8:00
Saturday 10:00-7:00
Sunday 11:00-6:00
Financing Available

SATISFACTION GUARANTEED!
PC Club offers 7 days return on all hardware products. 30 days for exchanges on defective products. Some restrictions may apply. See in store for details.
90 days same as cash.
Prices subject to change without notice.
Product availability subject to change.



San Diego Location
8014 Clairemont Mesa Blvd.
San Diego, CA 92111
Fax: (619) 277-8508
Tel: (619) 277-8151

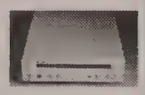
MasterCard
VISA

GRAND OPENING!

RESELLER PRICES ARE EVEN BETTER

PC CLUB

SONY 55E 2X CD-ROM



- IDE
- 250ms Access Time
- 300K Transfer Rate
- CD-I/Video-CD/Photo-CD Compatible

$112

MONITOR SPECIAL

EVERVIEW/ORCHESTRA

- 14" SVGA .28 ..... $189
- 14" SVGA .28 NI $209
- 15" SVGA .28 NI $289
- 17" SVGA $399

ACERVIEW

- 15" 56L SVGA NI $319
- 17" 76L SVGA NI $699

MAG

- DX-15F 15" SVGA NI $339
- DX-17F 17" SVGA NI $679

VIEWSONIC

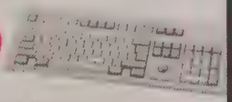
- 15ES15" SVGA NI $339
- 17G 17" SVGA Green Digital NI $669

FOCUS TRACKBALL KEYBOARD

With Built-in Trackball

- 101 Keys

$39

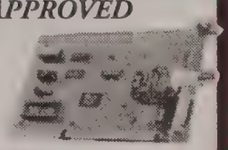


While quantities last

NETWORK CARDS

NOVELL APPROVED 2-IN-1

- BNC
- 10 Base T
- Jumperless



$29

NOVELL

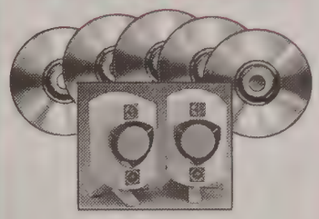
PENTIUM 90MHz BLOWOUT

- 3 PCI/2 VLB
- 256K Cache
- 8MB RAM
- Medium Tower w/230W PS
- 1.2 & 1.44 Floppy Drives
- PCI S3 2MB Video
- 2 High Speed Serial Ports
- 1 High Speed Bidirectional Parallel Port
- 540MB Hard Drive IDE
- 101 Keyboard
- Monitor Not Included

intel inside pentium

$1759

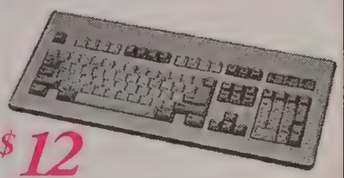
MULTIMEDIA UPGRADES



TEAC 4X Speed with Sound Blaster 16 $299

Toshiba 4X Speed with Sound Blaster 16 SCSI $399

101 ENHANCED KEYBOARD



$12

CREATIVE

CREATIVE LABS, INC.

SOUND CARDS

- 16 Basic $89
- 16 SCSI $159
- 16 ASP/Multi CD $186
- 16 ASP/SCSI 2 ..... $199
- 32 AWE $289

MULTIMEDIA SYSTEM SPECIAL!

486DX2-66 MULTIMEDIA SYSTEM

- Mini Tower w/230W PS
- 486DX4-100 Ready
- 3 VESA Local Bus Slots
- 256K Cache
- 8MB RAM
- 420MB Hard Drive
- 1.44MB Floppy Drive
- Local Bus SVGA w/ 16M Colors
- Local Bus IDE Controller
- 2S/1P/1G
- 2X Speed CD-ROM
- Sound Blaster 16 Card
- 101 Keyboard
- Mouse
- 14 CD Titles
- 1590 Amplified Speakers
- Monitor Not Included

intel inside

$1168

HARMONY III

- Panasonic 2X CD ROM
- Sound Blaster 16 MCD
- 14 CD Titles Include: Compton's Interactive Encyclopedia '95, World & US Atlas, etc.

$249

JAZZ SPEAKERS

JS

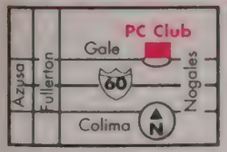
- J320AV 80W $59
- J707 AV 280W $119
- J818 AV 112W Per Channel $159

4X SPEED MULTIMEDIA KIT

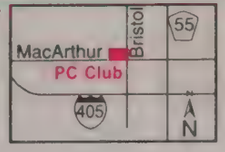
- Toshiba 4X CD ROM 15ms Access Time
- Sound Blaster 16 SCSI

- Speakers
- 14 CD Titles Include: Compton's Interactive Encyclopedia, World & US Atlas, etc.

$449



City of Industry
18537 E. Gale Ave., #B
City of Industry, CA 91748
Fax: (818) 913-0123
(818) 913-CLUB
(2582)



NEW **South Coast Plaza Location**
1421 MacArthur Blvd., Suite F-G
Santa Ana, CA 92704
Fax: (714) 979-3151
Tel: (714) 979-CLUB
(2582)

PC CLUB

SALE · UPGRADE · REPAIR · DATA RECOVERY · INSTALLATION

We Have What You Need!

MONTHLY SPECIAL

486DX-33/66MHz 256K CACHE — $889/$959
- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Minitower w/Digital
- 420MB HDD

VESA LOCAL BUS SYSTEM

MONTHLY SPECIAL

IBM 486SLC2-66 — $769
- IBM Manufactured Motherboards
- 2MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- IDE I/O 2 Serial/1 Parallel/1 Game Port
- SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Minitower w/Digital
- 420MB HDD

VESA LOCAL BUS SYSTEM

MONTHLY SPECIAL

PCI 90/66/60MHz — $1599 / $1499 / $1319
- 4MB Memory, 70ns
- 1.44FDD
- 3 Button Mouse
- PCI IDE I/O 2 Serial/1 Parallel/1 Game Port
- PCI SVGA w/1MB RAM
- SVGA 14" Monitor N.I.
- 101 Enhanced Keyboard
- Midtower w/Digital
- 420MB HDD

AST ASCENTIA 900N 4/75 CS10

486DX4-75MHz 10.3" DS-STN Color LCD — $2799
- 340MB Removable HDD - 1.44MB FDD
- 8MB RAM - SmartPoint Integrated Pointing Device
- MS-DOS® - MS Windows™ - B-Tools™
- CompuServe® - Prodigy® - America Online®
- Lotus Organizer® - ConnectSoft E-Mail Connection™
- LapLink Remote Access™ - WinFax Lite/COMit Lite™
- AST Works Mobile Ed. - AST On-Line User's Manual
- AC Adapter (115V/230V)

AST ASCENTIA 900N 4/75 CT10

486DX4-75MHz 10.4" TFT Color LCD — $4350
- 510MB Removable HDD - 1.44MB FDD
- 8MB RAM - SmartPoint Integrated Pointing Device
- MS-DOS® - MS Windows™ - B-Tools™
- CompuServe® - Prodigy® - America Online®
- Lotus Organizer® - ConnectSoft E-Mail Connection™
- LapLink Remote Access™ - WinFax Lite/COMit Lite™
- AST Works™ Mobile Ed. - AST On-Line User's Manual
- AC Adapter (115V/230V)

MULTIMEDIA KIT CD 16

CD ROM
Sound Blaster
12 CD Titles
Microphone
Speaker

ONLY $245

MONITORS

Shamrock 17"	$519
Shamrock 15"	$305
Shamrock 14"	$205
14".39dpi SVGA N.I.	$169

KEYBOARDS

101 Enhanced Keyboard	$19

HARD DRIVES

260MB	$149
340MB	$169
420MB	$179
540MB	$199

FLOPPY DRIVES

1.2 FDD	$39
1.44 FDD	$35

CPU

486DX-33MHz	CALL
486DX-66MHz	CALL

ADD-ON CARDS

32 Bit VL-Bus IDE I/O	$25
32 Bit VL-Bus SVGA Card	$69
16 Bit IDE I/O	$15
16 Bit SVGA Card	$59
MFM (XT or AT) Controller	$29
RLL (XT or AT) Controller	$29
SCSI 16bit (Future Domain)	$59

CASES + POWER SUPPLY

Mini Tower w/230 Watt	$35
Mid Tower w/230 Watt	$65
Full Tower w/250 Watt	$79

CD-ROM

Panasonic/Mitsumi 2x	$119
Teac/Toshiba 3x	CALL
Teac/Toshiba 4x	CALL

SOUND CARD

16 Bit Sound Blaster Compatible
Use For Panasonic + Mitsumi + Sony $65
Speaker 120 Watts $65

TAPE BACK-UP

Colorado 250MB	$159
Conner 250MB	$159

FAX/MODEM

14.4K V.32, V.42 Bit	$69
14.4K w/Voice Mail	$79

HARD DRIVE REPAIR

CAPACITY	REPAIR PRICE	CAPACITY	REPAIR PRICE
20 - 39MB	$35	200 - 299MB	$90
40 - 49MB	$50	300 - 399MB	$100
50 - 89MB	$65	400 - 499MB	$110
90 - 159MB	$75	500 - 679MB	$140
160 - 199MB	$80	700 - 1GB	$185

MONITOR REPAIR

WE BUY NON-WORKING VGA MONITORS

MONITOR	
Any Mono	$39
Any CGA or EGA	$55
Any VGA or SVGA	$65
Any Multisync 12" & 14"	$85
Any Terminal	$65
Any 15" Monitor	$100
Any 17", 19", 21"	$200

CRT AND FLYBACKS EXCLUDED

FREE Pick-up & Delivery in O.C. if more than Five Monitors

DATA RECOVERY

CAPACITY	MFM/RLL/IDE ESDI/SCSI	CAPACITY	MFM/RLL/IDE ESDI/SCSI
20 - 39MB	$250	200 - 299MB	$500
40 - 49MB	$300	300 - 399MB	$550
50 - 89MB	$350	400 - 499MB	$600
90 - 159MB	$400	500 - 679MB	$650
160 - 199MB	$450	700 - 1GB	CALL

Specialize in Mac, DOS, Novell.
Data Recovery Includes: Repair of the Drive.
No Charge If We Are Unable to Recover Data.

SYSTEM UPGRADE

XT or 286 to 386DX/33MHz w/4MB	$199
286 or 386 to 486DX/33MHz w/1MB	$259
286 or 386 to 486DX2/66MHz w/1MB	$339

UPGRADE SPECIAL

XT 286 or 386 to 486SLC/66MHz VLB w/1MB + Math Coprocessor + Cooling Fan

ONLY $199

UPGRADES WHILE YOU WAIT!

FREE LABOR

SYSTEM REPAIR

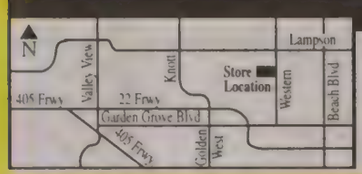
We Will Solve Any Problem On Your System!

$30 + Parts

FLOPPY DRIVE REPAIR

5.25" (360K & 1.2MB)	$19
3.5" (720K & 1.4MB)	$19
3.5" PS/2 (720K & 1.4MB)	$35

PRO COMPUTER COMPANY



12761 Western Ave., Suite B, Garden Grove, CA 92641

TEL: 714/891-8293 • FAX: 714/891-3269

ONE YEAR WARRANTY PARTS & LIFETIME WARRANTY LABOR

Business Hours:
Mon.–Fri. 9:00–6:00
Sat. 10:00–2:00

Prices and specifications are subject to change w/out notice. 15% Restocking fee on returned items.

EXCELLENT EDUTAINMENT *continued...*

continued from page 178

a 17MB QuickTime file managed by the navigation module of L7, so that when you "look around" the environment, you are actually scrolling a movie in four different directions.

EDUTATIONAL BOOKS

The recent generation of fully graphic illustrated technical books is very multimediatic at the paper level, even without a CD. The concepts aren't dumbed down—they are isolated, clarified, and projected. These three titles can help the average adult, but are also ideal for the teen or even some pre-teens who are already on their way to personal empowerment in the digital convergence.

Erik Holsinger's *How Music and Computers Work* (Ziff-Davis, $29.95, 153 pp.) can not only serve as the garage band's companion, but open up doors for anyone who wants to extend their Mac or PC into the digital music arena. The author covers all the corners of audio technology and MIDI, from digital audio technology to composition, performing live, and digital audio in film and video, plus hardware and software for building your own MIDI system. You'll have to figure out the name of your band on your own. It comes with an audio CD with enlightening interviews, demos, and samples.

Computers: A Visual Encyclopedia (Alpha Books, $25, 371 pp.) is the "everything you ever wanted to know" source, which explains what you want to know in such a clear, illustrated, and annotated fashion that you can grasp the concepts in minutes. Sometimes seconds. Not only abstract topics like nanotechnology and fuzzy logic, but the upfront on HyperCard and Lotus 1-2-3.

Dante and Blake conceptualized religion and morality into physical paradigms that could be described and modeled. *Programming Illustrated* (Que, $24.99, 192 pp.) tries its darndest to do the same for the ethereal realms of computer programming. Some may argue that the mechanistically driven 3-D graphic structures and processes here over-literalize the architecture of programming, language, and dataflow to the point where some of it may mislead from practice, but it sure beats the hands-waving-in-the-air school of instruction. The only way this book could be improved would be to include software and linked tutorials. ■

Copyright © 1995 by Tony Reveaux. All rights reserved.

RESOURCES:

Alpha Books
201 West 103rd St.
Indianapolis, IN 46290

Que
PTR Prentice Hall
113 Sylvan Ave.,
Route 9W
Englewood, NJ 07632

Davidson & Associates, Inc.
P.O. Box 2961
Torrance, CA 90509
1-800-545-7677

Dynamix, Inc.
1600 Millrace Dr.
Eugene, OR 97403
(503)343-0772

Living Books, A Random House/Brøderbund Co.
500 Redwood Dr.
P.O. Box 6121
Novato, CA 94948-6121
(415)382-4400

The ImagiNation Network
577 Airport Blvd.
Burlingame, CA 94010
(415)548-2500

T/Maker Company
1390 Villa St.
Mountain View, CA 94041
(415)962-0195

Ziff-Davis Press
5903 Christie Ave.
Emeryville, CA 94608
1-800-688-0448

YOU WILL OUR DEALS!
We Will BEAT any Advertised Price!
HP • OKIDATA • TOSHIBA • NEC • APPLE • IBM • AST • COMPAQ • PANASONIC • CITIZEN • NOVELL • EPSON

IBM 486 DX2 50 MHz
intel inside
• 4 MB RAM • 250 H.D. • VLB • Windows Accelerator Video • 8 AT Slots • 6 Drive Base
• 1.2 & 1.44 Floppy • Internal Data/Fax Modem • Much Free Software • 14" .28 NI Hi Res. Color Monitor • Pentium Upgradable
• Upgrade options: 4MB to 8 MB add $165; 250 HD to 540 HD add $99; 2X CD-ROM, Sound Blstr-16, 17 titles, & Spkrs; add $239
Energy
$1099
• 1 Yr. IBM Warranty w/48 Hr. replacement

HP PRODUCTS
• DESKJET 540 ..... $295
• 500C/560C $379/489
• HP 4P/4MP $939/1289
• HP 4+/4L $1369/629
• HP LASERJET 4M $1749
• HP LASERJET 4ML $969
• HP DESKJET 1200C ..... Best Price

486-33MHz
• 4MB RAM 255MB HD • 1.2 or 1.44 FDD • SVGA Video Card • AT I/O & IDE (2S, 1D, 1G) • 101 Enhanced Keyboard • Mini Tower Case & P.S. • SVGA 14" Monitor 1024x768, .28 NI
$699!

TOSHIBA NOTEBOOKS
T-4400 $995 2/120
T-1900 $1149 4/120
T-1900 $1225 4/200
T-1910 $1319 4/200
T-1900c $1425 4/200
T-1950 $1495 4/200
T-1910cs $1499 4/120
T-4500c Active Color $1595 4/120
T-1950ct Active Color $2199 4/200
CALL FOR SUPER SPECIALS ON ALL NOTEBOOK MODELS
T-2400/T-1960 CALL
T-4700/T-4800 CALL
T-4600c/T3400 CALL
SPECIAL PRICE ON MEMORY UPGRADES FOR ALL SYSTEMS & ACCESSORIES

Apple
Mac 605 4/160 w/Software Bundle..... $799

COMPUTER REPAIR LOWEST PRICES!
FAST, EXPERT TROUBLE-SHOOTING BY OUR VERY EXPERIENCED ENGINEER.
-UPGRADES-
-DATA RECOVERY-
WE REPAIR ALL MAKES AT THE LOWEST PRICE!
(Including Macintosh, IBM Compatibles, ALL Laser Printers)
WE WILL SOLVE THE PROBLEM.
SYSTEMS & MONITORS REPAIRED
LASER PRINTER REPAIR!
213 655-9666
310 659-8202
MON-SAT

INTEL PENTIUM-90MHz PCI
• Pentium 90MHz CPU/CPU Fan • 8MB RAM • 420MB HD • 1.2 or 1.44 FDD • PCI IDE Controller (2S,1P, 1G) • PCI SVGA Accelerator 2 MB Card • 14" High Res SVGA .28 NI Monitor • 101 Keyboard & Mouse
$1749 THAT'S RIGHT!

Apple Macintosh Blowout
BLACKBIRD SPECIAL
520 ... 520c ... 540 ... 540c
IN STOCK NOW CALL!!
POWER PC
6100 8/250 ..... $1249
6100 8/250/CD $1449
7100 8/250 ..... $2099
7100AV 8/500/CD $2649
8100 8/250 ..... $2629
8100AV 16/500/CD $3349
Mac 630 4/250 ..... CALL
Apple Laser Select 310 ..... $539
Mac 605 4/160 w/Color Monitor & Keyboard w/Software $1249
Mac 610 8/160 ..... $1395
Mac 650 8/230 ..... SIN STOCK
Mac Color Monitor 14" $289
Mac 840AV 8/230/CD ..... $CALL
PowerBook 170 ..... $CALL
PowerBook 145B 4/80 ..... $1209
PowerBook 150 4/120 ..... $1349
Power Book 180C 4/120/Modem ..... In Stock
CALL FOR OTHER MODELS
MEMORY UPGRADES & FAX AVAILABLE

University, Government & Corporate P.O's. Welcome
BMI COMPUTER INC.
611 N. La Cienega Blvd., Los Angeles, CA 90069
1/4 Block North of Melrose
(310) 659-8202 (213) 655-9666
Since 1985
Fax (310) 659-3803 • FREE PARKING IN REAR
Prices subject to change without notice and reflect a cash discount

WE CONNECT YOU ! ! !

Multimedia Kit

Creative Labs
Sound Blaster
Digital Schoolhouse

Sound Blaster 16 stereo audio card
Stereo speakers
Double-Speed Technology CD-ROM drive
20 educational titles software including Allie's Playhouse

$255
IN STOCK

1-800-367-5267
WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

PCI Local Bus Ethernet Card

32 Bit, (AMD Chip)
$99

1-800-367-5267
WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

CPU Chips

AMD 486 DX2 66	$155
Intel 486 DX2 66	$170
Pentium 60 MHz	$375
Pentium 66 MHz	$400
Pentium 90 MHz	$615

1-800-367-5267
WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

Intel EtherExpress 16

intel®
INVENTORY CLOSEOUT SPECIAL
$51
ISA Lan Adapter

1-800-367-5267
WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

CPU Chips

AMD 486 DX2 66	*$155*
Intel 486 DX2 66	*$170*
Pentium 60 MHz	*$375*
Pentium 66 MHz	*$400*
Pentium 90 MHz	*$615*

HD

210 MB	*$150*
420 MB	*$170*
540 MB	*$215*

Cases

Minitower *$35*

Mother Board W/CPU

50MHz Opal LX 486 SLC2-50 IBM	*ISA*	*$100*
66MHz AMD 486 DX2-66	*3VLB 256K*	*$285*
66MHz Intel 486 DX2-66	*3VLB 256K*	*$285*
60MHz Intel Pentium	*VIP 512K*	*$590*
90MHz Intel Pentium	*Intel 256K*	*$925*

Special Offers

MPEG Video decoder card Run CD-I, MPEG-1 Video and Audio *$240*

1-800-367-5267
WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

High Performance ETHERNET Products

Ethernet Hubs

8 RJ45, 1 AUI, 1 BNC	$135
12 RJ45, 1 AUI, 1 BNC	$299

Ethernet Repeaters

2 BNC, 2 AUI	$185
4 BNC, 4 AUI	$310

VLB Ethernet Cards

VLB, 3 in One (SMC Chip)	$99

Ethernet Adapters

NE2000, Combo, Jumperless	$35
NE2000, TP, Jumperless	$32
NE2000, BNC, Jumperless	$32
EISA 32 Bit, 3 in one	$160

Network Software

Personal NetWare	$53
-V3.12 5/10 User	$599/1299

Pocket Lan Adapter

Pocket Ether TP + BNC	$99

PCMCIA Ethernet Adapter

PCMCIA IC Lan Card BNC	$170
PCMCIA IC Lan Card UTP	$170
PCMCIA IC Combo Card	$185

100 Mb/s Fast Ethernet

Compatible with Cat. 3 or higher existing 4 Twisted Pair Cabling RJ45 Connections . Novell Certified

Ether-100-ISA Adapter	$189
Ether 100-Eisa Adapter	$315

VISA & MASTERCARD
Prices Subject to change without notice

1-800-367-5267

WEST HILLS LAN SYSTEMS
8943 Fullbright Ave. Chatsworth, CA 91311

ADVERTISER BY CITY INDEX

FOR YOUR CONVENIENCE, HERE IS A LIST OF ADVERTISERS BY COUNTY AND CITY. PLEASE SEE THE ADVERTISER INDEX ON PAGE 240 FOR THE PAGE NUMBER OF THE ADVERTISEMENT.

LOS ANGELES COUNTY

City of Industry
Advanced Pro Technology
Atron
BMI Computers
CD Discount
CitiCom Computers, Inc.
Computek
Comtrade
CS Source
Dynasys
Kingsley Computer, Inc.
LTI Computer
Macro Computer
PC Club
PC Magic
PC Warehouse
Royal Electronics, Inc.
USA Systems

Claremont/Montclair/ Pomona/Rancho Cucamonga
Domino Computer
Computer Market Place
MS Computer

Gardena
Computek
Kamfoz
PC Warehouse

Hacienda Heights/Walnut
Asean
Binomial Systems
Domino Computer
Genisys
Hunsen Int'l
MIPSystems
Stylin Multimedia
Syntax

Hawthorne/Lawndale
ATC Computer
ATS, Inc.
Creative Computers

Long Beach/ Paramount
KB Computer

Los Angeles
ATC
BMI
CompuTopia
CompuWest
Cygma Computer
Dav Tech
Direct Net
Einstein Computer
EZ Computer
Input Automation
ITG
Micro City
MIG Computer Systems
Narae Computer
Okidata
3-6 Computers
Uninex Corp.
Uptown Computer

Pasadena
Advanced Computer Center
Dynasys
Envision
Interact
Mt. Sierra College
New Technologies
Pasadena Computer Center
TCC Systems
The California Computer

San Fernando Valley
Alcom Systems
Americal/CompuCal
Annex Communications
ASC Computer
ATC Computer
B-Ware Computers
Domino Computer
Earthlink Network
Electronic Music Box
General Software
Hacker Electronics
IBA Computer
KBBS
Mars Computer
Maximus
MDW Technology
Micro City
PC Service
PC Warehouse
R-Tech Computers
Sigma Business Systems
Silicon Ave.
Soft Hard Systems
Trade Tek
20/20
Unitek Computer Stores
West Hills LAN

San Gabriel Valley
American Insight
CCS
Computer Pacer
Digital Micro
Goodman Music
HJ Technology
IET
Intellicomp
Kingsley Computer
Lightside, Inc.
Maximus
Micro City
NSC
Odyssey Online
PC Magic
PC Warehouse
Quality Computer
Superior Computer
Symphony Computer
TSC Computer Products
West Tech

Santa Fe Springs
Hotel California
Jenlish Int'l., Inc.
Kinetic Cyber Systems
Melco International
New Technologies
PC Warehouse

Santa Clarita
GCS/All Micro Services

Santa Monica/Marina Del Rey
Authorized Service Technology
Cinenet Communications
Computer Business Center
Creative Computer
Micro League
Theta Computer

South Bay
Advanced Computer & Technology
Alltech Electronics
CD Dossier
Domino Computer
Fry's
Input Automation
Kamfoz
KB Computer
Nova Software
PC Warehouse

West Los Angeles
Active Business Computer
20/20 Technologies
Citicom
Creative Computer
Goodman Music
LA Computer Center
Micro Base
Okidata
Unicomp Systems
Unitek Computer Stores

ORANGE COUNTY

Anaheim/Fullerton
B&N Computer
Delta Internet Services
DMS-Memory Upgrades
EZ Computer
Genesis Computer Systems, Inc.
Instruction Plus
Just CD's
MagicTek Computers
MicroByte Computers
Micro DataNet
PCM Technologies
Silicon Avenue
ZyXEL

Brea
American Tech Enhance
MicroSource
USM
Software Education of America
9th Generation

Buena Park/Cerritos/ Norwalk
Advanced Computer Center
Advanced Computer & Technology
Computer Business Center
Computer Marketplace
EKM Computer
Mars Computers
Micro City
NET Computer

Capistrano/Rnch. Santa Margarita/Laguna Hills/Lake Forest
Computer Max
Creative Computers
Intech
Kamfoz
K-Micro Computers
Lake Forest Computer Center
Logicache Computer, Inc.
Macro Technologies
MicroCity
Super Show Productions

Corona/Orange/ Yorba Linda
Domino Computer
Future Computing Solutions
RPB Computer

Cypress/Los Alamitos/ Stanton/Westminster
Computer Plaza
Katronic Co.
LTD Computer
Mars Computer
Peaktron Computer

Fountain Valley
Domino Computer
Fry's
IIT Computer

Garden Grove
C&G Computer Software Outlet
Citicom Computer, Inc.
CompuTek
CompuTopia
EZ Computer
Kaiwan Corp.
Mars Computers
Matrixsys Group
MIG Computer Systems
ProComputer Co.

Huntington Beach
Abcom Computer Products
Anthurium Technology Company
Computer Liquidation Center
U.S. Computer Distribution

Irvine/Newport Beach
Domino
HiTek
Realm Internet Systems
USM

Santa Ana/Tustin
ACI Computers
ACP-Advanced Computer Products, Inc.
Alltech Electronics
Computer Max
Computix

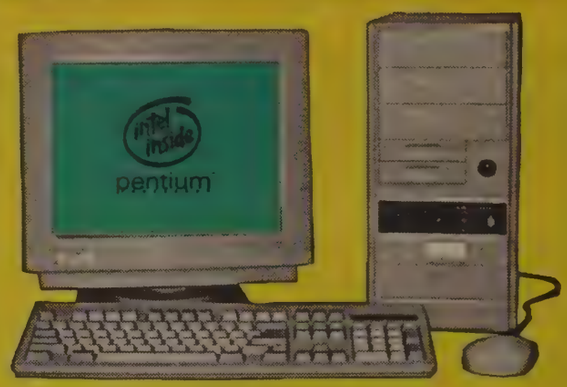
RIVERSIDE COUNTY

Mars Computer
Microsel, Inc.

SAN DIEGO COUNTY

Alltech Electronics
Creative Computers
Jenlish Int'l., Inc.
Micro City
PC Club

4X CD-ROM MULTIMEDIA SYSTEMS



PCI POWERSTATION

- Intel Pentium™ CPU
- 256K WB Fast Cache
- 16MB RAM (Expandable to 128MB)
- 1.06GB 9ms Fast & Wide SCSI-3 Hard Drive
- PCI Adaptec 2940W Wide SCSI-3 Controller
- PCI Diamond Stealth 64 (2MB RAM) Accelerator
- 17" Mag DX17F .26mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster AWE32 Sound Card w/Advanced WaveEffects Synthesis
- 18 Popular CD Software Titles
- 115 Watt Hi-Fi Stereo Speakers
- High Quality Full Tower Case (250W UL PS)

Pentium 60MHz $3249
Pentium 90MHz $3479
Pentium 100MHz $3829

PCI MEDIA ULTIMA

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 16MB RAM (Expandable to 128MB)
- 850MB 10ms Enhanced IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI Diamond Stealth 64 (2MB RAM) Accelerator
- 17" Mag DX17F .26mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- Hi-Resolution Mouse
- 101 Key Keyboard
- Teac Super-Quad (4X) 195ms CD-ROM
- Sound Blaster 16 Multi CD Sound Card
- 18 Popular CD Software Titles
- 115 Watt Hi-Fi Stereo Speakers
- High Quality Mid Tower Case (230W UL PS)

486dx4/100MHz $2319
Pentium 60MHz.....$2519
Pentium 90MHz $2749
Pentium 100MHz $3099

PCI HOME OFFICE PC

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI S3 864 Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Double Speed (2X) CD-ROM
- Sound Blaster 16 Multi CD Sound Card
- 18 Popular CD Software Titles
- 80 Watt Hi-Fi Stereo Speakers
- 14.4 Voice Fax/Modem (answer calls)
- Deluxe Mid Tower Case (230W UL PS)

486dx2/80MHz.....$1499
486dx4/100MHz.....$1639
Pentium 60MHz.....$1789

PCI BEST BUY

- 486DX2 or Pentium™ CPU
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- PCI Enhanced IDE HD Controller
- PCI S3 864 Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- Two High Speed Serial Ports (16550 UART) & 1 Parallel & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Deluxe Mid Tower Case (230W UL PS)

486dx2/80MHz $1199
486dx4/100MHz $1339
Pentium 60MHz $1479
Pentium 90MHz $1709
Pentium 100MHz.....$2059

VLB MEDIA BEST BUY

- 486DX2 CPU & Pentium™ OverDrive Ready
- 256K WB Fast Cache
- 8MB RAM (Expandable to 128MB)
- 540MB 12ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator (1MB RAM)
- 15" Non-Interlaced .28mm Flat Screen Monitor
- 2 Serial Ports, 1 Parallel Port & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Double Speed (2X) CD-ROM
- Sound Blaster 16 Multi CD Sound Card
- 18 Popular CD Software Titles
- 30 Watt Stereo Speakers
- Deluxe Mid Tower Case (230W UL PS)

i486dx2/66MHz $1379
486dx2/80MHz.....$1379
486dx4/100MHz $1509

VLB BEST BUY

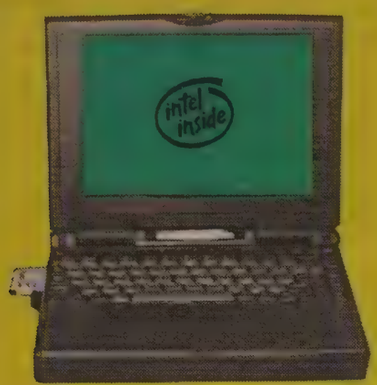
- 486DX2 CPU & Pentium™ OverDrive Ready
- 3 Vesa Local Bus Compliant Slots
- 256K WB Fast Cache
- 4MB RAM (Expandable to 128MB)
- 424MB 13ms IDE Hard Drive
- 32Bit VL-Bus IDE HD/FD Controller
- 32Bit VL-Bus Graphics Accelerator (1MB RAM)
- 14" Non-Interlaced .28mm SVGA Color Monitor
- 2 Serial Ports, 1 Parallel Port & 1 Game Port
- 1.44MB Floppy Drive
- 101 Key Keyboard
- Hi-Resolution Mouse
- Deluxe Mid Tower Case (230W UL PS)

486dx/40MHz $899
i486dx2/66MHz.....$929
486dx2/80MHz $929
486dx4/100MHz.....$1069

90 DAYS SAME AS CASH • BUSINESS LEASING AVAILABLE

Three Year Labor - One Year Parts Warranty Restrictions and Limitations apply. 19.8% APR for financing. Call for information on leasing. No refund on printers. Printers only carry manufacturer's warranty. Refer to printer's authorized warranty service centers for repair. We test our systems for 48 hours before shipping. A copy of our limited warranty is available prior to sale from your sales representative. Prices subject to change w/out notice. Not responsible for typographical errors. 3% cash discount.

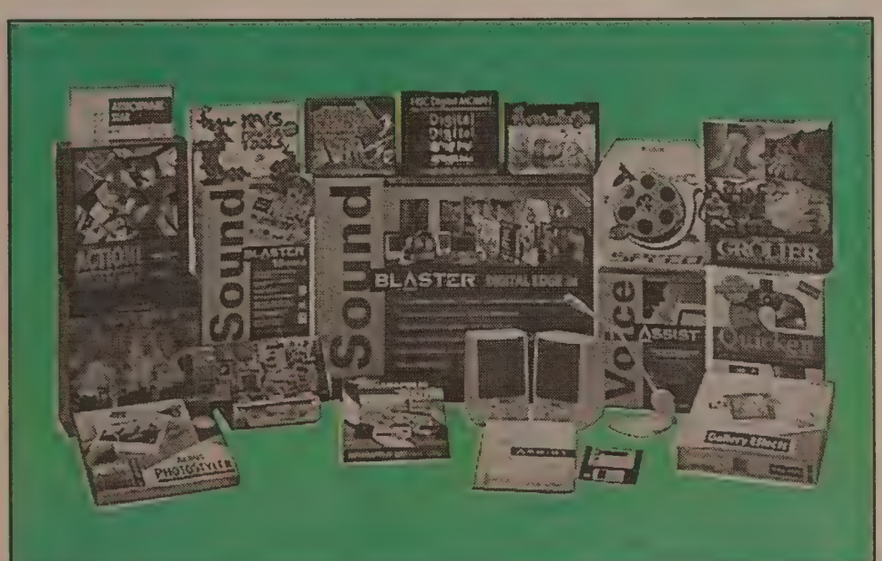
THE MAGICAL COLOR SOUND NOTEBOOK



- SL Enhanced 486DX-33, DX2-50/60, DX4-75/100MHz
- 4MB RAM, Easy Expand up to 20MB
- 128KB BIOS Flash ROM
- Int. 340MB Hard Disk (530/700MB)
- 3.5" 1.44MB Floppy Drive
- Ports for 1S, 1P (Bi-Directional), VGA, PS2 Keyboard, Audio Jack, Earphone out
- PCMCIA 2 Type II or 1 Type III
- 85/86-Key PC/AT w/12 Function Keys KB
- 16mm Center Micro Trackball Mouse Built-in
- 10.3" Dual Scan DSTN 640x480 Simultaneous
- 9.5" Active Scan TST 640x480 Simultaneous
- 32bit VLB w/1MB RAM Windows Accelerator, NiMH Rechargable up to 4.5hr. Quick-Charge
- Weight 4.5lbs Size: 10.9"Wx8.58"Dx1.75"H
- Optional Accessories: Docking Station, External Battery Charger, Automobile Car Cable
- 1 Year Parts & Labor Warranty

	MONO	DUAL SCAN	ACTIVE COLOR
486DX2/66MHz	$1505	$1955	$2855
486DX4/100MHz	$1825	$2275	$3175

530MB HDD upgrade from 340MB	$195
700MB HDD upgrade from 340MB	335
4MB RAM upgrade	195
Extra Battery	95
Car Adapter	95
Laplink Cable	10
PCMCIA 14.4 fax/modem	155
PCMCIA Ethernet Network Adapter	145
Docking Station for Sound Notebook	495



TEAC 4X MULTIMEDIA KIT

Sound Blaster 16 Sound Card
TEAC Super Quad (4X) Speed CD ROM
18 CD Titles Software
80 WATT HI-FI STEREO SPEAKERS

$349

4X SCSI MULTIMEDIA KIT

Sound Blaster 16 SCSI-2 Sound Card
Toshiba 3501B QUAD Speed CD ROM
18 CD Titles Software
80 WATT AMPLIFIED SPEAKERS

$469

2X MULTIMEDIA KIT

Sound Blaster 16 Sound Card
Sony 55E Double Speed CD ROM
18 CD Titles Software
80 WATT AMPLIFIED SPEAKERS

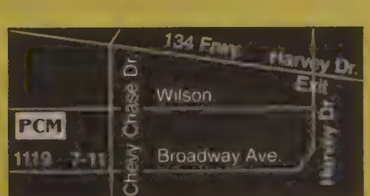
$249

BUSINESS HOURS:
MON-FRI 10AM-7PM
SATURDAY 10AM-6PM

DISCOVER VISA MasterCard

PC Magic

Industry: 818.336.6862
Glendale: 818.247.8613



GLENDALE
1121 E. Broadway,
Suite 200 (2nd Floor)
Glendale, CA 91205
TEL: (818) 247-8613
FAX: (818) 247-8877

CITY OF INDUSTRY
16025 Gale Ave., Suite A-4
City of Industry, CA 91745
TEL: (818) 336-6862
FAX: (818) 336-6872

ADVERTISERS INDEX

3-6 COMPUTERS 50
20/20 TECHNOLOGIES 9
ABCOM COMPUTER PRODUCTS 186
ACI, AMERICAN COMPONENT INT'L 167
ACP SUPERSTORE 67,229
ACTIVE BUSINESS COMPUTER 46,170
ADVANCE PRO TECHNOLOGY 211
ADVANCED COMPUTER & TECHNOLOGY 52,53
ADVANCED COMPUTER CENTER 34
ADVERTISING CONCEPTS 30
ALCOM SYSTEMS 241
AMERICAL / COMPU CAL 3
AMERICAN INSIGHT 86
AMERICAN MEGA SHOWS 201
AMERICAN TECH ENHANCE COMPUTER 168
ANNEX TELECOMMUNICATIONS 215
ANTHURIUM TECNOLOGY CO. 219
ASC COMPUTER 222,223
ASEAN 94,95
ATC 32,33
ATS 120
AUTHORIZED TECHNICAL SERVICES 74
B & N COMPUTER 36
B-WARE 186
BINOMIAL SYSTEMS 21
BMI COMPUTERS 235
BONANZA SHOW PRODUCTIONS 201
C&G COMPUTER SOFTWARE OUTLET 169
CALIFORNIA COMPUTER SYSTEMS 172,173
CCS COMPUTER 212,213
CITICOM COMPUTER, INC. 31
COMPUTEK 25
COMPUTER BOOKS 4 LESS 199
COMPUTER BUSINESS CENTER 202,203
COMPUTER LIQUIDATION CENTER 87
COMPUTER MARKETPLACE 196,197
COMPUTER MAX 40,41
COMPUTER PACER 19
COMPUTERLANE, INC. 99
COMPUTIX 205
COMPUTOPIA, INC. 29
COMTRADE 114,115
CP TECHNOLOGY 76
CREATIVE COMPUTERS 9
CRL 82
CS SOURCE 85
CYGMA COMPUTER 72
DAV-TECH 4,5
DELTA INTERNET SERVICES 87
DIRECT NET 89
DMS-MEMORY UPGRADES 190
DOMINO COMPUTER 23
DYNASYS 48,49
EARTHLINK NETWORK 81
EINSTEIN TECHNOLOGY 116,117
ELECTRONIC MUSIC BOX 153
ENVISION MULTIMEDIA 155–157
EVERNET EDUCATION SERVICES 38
EZ COMPUTER 16
FRY'S ELECTRONICS 2,121–151,243
FUTURE COMPUTING SOLUTIONS 111
GATETRONIX CONTROL SYSTEMS 187
GENERAL SOFTWARE 91
GENESIS COMPUTER SYSTEMS, INC. 51
GENISYS MICRO CONCEPTS 94,95
GIGATEK 8
GRANITE - DIGITAL 160
HACKER ELECTRONICS 17
HDSS, HARD DRIVE SUPER SOURCE 218
HJ TECHNOLOGY 199
HOTEL CALIFORNIA 82
I.E.T. 63
IBA COMPUTERS 154
IIT COMPUTER 214
INPUT AUTOMATION 166,192
INTECH 62
INTELLICOMP TECH 105
INTERACT! 38
JENLISH INTERNATIONAL 179
JUST CD'S 161
COMPUWEST 158
KAIWAN CORP 217
KAMFOZ COMPUTER SYSTEMS 109
KATRONIC COMPANY 206
KB COMPUTER 163
KBBS 209
KINETIC CYBER SYSTEMS 82
KINGSLEY 106,107
LAKE FOREST COMPUTER CENTER 171
LAN PROFESSIONAL 193
LIGHTSIDE, INC. 207
LOGICACHE COMPUTERS, INC. 66
LTD COMPUTER 36
LTI COMPUTER 71
M.I.G. COMPUTER SYSTEMS 83
MACRO COMPUTER 24
MACRO TECHNOLOGIES 190
MAGIC SONIC COMPUTER 193
MAGICTEK COMPUTERS, INC. 174,175
MARS COMPUTER 42
MATRIXSYS 169
MAX GROUP 45
MAXIMUS 180,181
MELCO INTERNATIONAL 77
MICRO BYTES COMPUTER 230
MICRO DATANET 119
MICRO LEAGUE 159
MICRO SOURCE COMPUTERS 177
MICRO-CITY/GST, INC. 188,189
MICROSEL, INC. 47
MIPSYSTEM, INC. 194
MT. SIERRA COLLEGE 158
NARAE SYSTEMS 75
NET COMPUTER 231
NEW HORIZONS LEARNING CENTER 62
NEW TECHNOLOGIES 68,69
NEX GEN 39
NOVA SOFTWARE 217
NOW TECHNOLOGIES 60
NSC COMPUTER 222,223
ODYSSEY ONLINE 210
PASADENA COMPUTER CENTER 220,221
PC CLUB 232,233
PC MAGIC 238,239
PC SERVICE 61
PC WAREHOUSE 17
PCM TECHNOLOGIES 8
PEAKTRON COMPUTER, INC. 60
PRO COMPUTER SERVICE COMPANY 234
PROTEGE CORPORATION 8
QUALITY COMPUTER 106,107
R-TECH COMPUTER SALES & SVC. 20
REALM INTERNET SYSTEMS 90
ROBERT AUSTIN CORP. 43
ROYAL ELECTRONICS 64,65
RPB COMPUTER 182
SCCCA 66
SIGMA BUSINESS SYSTEMS 37
SILICON AVE. 199
SMARTIMAGER CORP. 244
SOCRATES COMPUTER SYSTEMS 78,79
SOFT-HARD SYSTEMS 55
SOFTWARE EDUCATION OF AMERICA 160
STRATA REMARKETING 184,185
STYLIN MULTIMEDIA 161
SUPER SHOW PRODUCTIONS 199
SUPERIOR COMPUTER 182
SYMPHONY COMPUTER 92,93
SYNTAX COMPUTER 26
SYSTEM DYNAMIC GROUP 48,49
TCC 58
THETA COMPUTER 73
TRADE TEK 240
TSC COMPUTER 222,223
TTS MULTIMEDIA 154
U.S. COMPUTER DISTRIBUTION 113
UNITEK COMPUTER STORES 11–15
USA SYSTEMS 101
USM DISTRIBUTORS 164,165
VANISHED CHILDREN'S ALLIANCE 62
WALNUT CREEK CDROM 154
WEST HILLS LAN 236
WEST TECH 56,57
ZYXEL 174,175

This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions.

TRADE TEK 1•800•238•4453

HARD DRIVE WAREHOUSE

21820 NORDHOFF STREET, UNIT A • CHATSWORTH, CA 91311
(818) 727-9054 • FAX (818) 727-9064

CALL FOR LOWEST PRICES!!

425MB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Conner	420A IDE	12ms	3.5"LP	$175/325
HP	C2235 SCSI	10ms	3.5"HH	$185/285
Quantum	425S SCSI	12ms	3.5"LP	$255/355
Seagate	3491 IDE	12ms	3.5"LP	$205/355
Seagate	3550N SCSI	12ms	3.5"LP	$269/369
WD	2420 IDE	11ms	3.5"LP	$199/349

540MB

Maxtor	540 MV	12ms	3.5"LP	$199/349
Quantum	540A IDE	12ms	3.5"LP	$239/389
Quantum	540S SCSI	12ms	3.5"LP	$239/339
Seagate	3660A IDE	10ms	3.5"LP	$215/365
WD	2540 IDE	12ms	3.5"LP	$250/400

750MB

Quantum	730S SCSI	12ms	3.5"LP	$275/375
Conner	850A IDE	12ms	3.5"LP	$310/460

1.0GB

Conner	1060S SCSI	10ms	3.5"LP	$510/610
Fujitsu	2694 SCSI	10ms	3.5"HH	$499/599
Micropolis	2210A IDE	10ms	3.5"LP	$395/545
Seagate	31220 A IDE	10ms	3.5"LP	$525/625
Seagate3	1220A SCSI	12ms	3.5"LP	$409/509
Seagate	11200NDSCSI	10ms	3.5"LP	$435/535
WD	31000 IDE	10ms	3.5"LP	$465/615
HP	2247 SCSI	10ms	3.5"LP	$495/595
HP	3323 A SCSI	10ms	3.5"LP	$515/665

1.2GB

Maxtor	1240S SCSI	8ms	3.5"HH	$575/675
Conner	1275A IDE	12ms	3.5"LP	$425/575

1.7GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Micropolis	2217 SCSI	10MS	3.5"HH	$775/875
Micropolis	2217A IDE	10MS	3.5"HH	$785/885
Micropolis	2217AV SCSI	10MS	3.5"HH	$945/1045

2.0GB

DEC	5200 SCSI	11ms	5.25"H	$800/900
HP	2490A SCSI	9ms	3.5"HH	$950/1050
Quantum	2100 SCSI	10ms	3.5"HH	$885/985
Seagate	12400N SCSI	9ms	3.5"HH	$929/1029
Seagate	32550N SCSI	8ms	3.5"LP	$1295/1395
Seagate	12550N SCSI	8ms	3.5"HH	$1250/1350

3.0GB

Micropolis	1936 SCSI	10ms	5.25"FH	$1199/1299
Seagate	43400N SCSI	8ms	5.25"FH	$1599/1699
DEC	5300S SCSI	12ms	5.25"FH	$1099/1199

4.0GB

DEC	5400S SCSI	12ms	5.25"FH	$1950/2050
Seagate	15230N SCSI	9ms	3.5"HH	$1919/2019
Seagate	15150N SCSI	8ms	3.5"HH	$2425/2525
Micropolis	3243 SCSI	8ms	3.5"HH	$2050/2150

9.0GB

Seagate	410800N SCSI	12ms		
5.25"FH				$3599/3699
Micropolis	1991 SCSI	12ms	5.25"FH	$3350/3450

DISK ARRAY, RAID SYSTEM

4GB	$4800
18GB	$15,000
Call for Other Models	

SCSI CONTROLLERS

ADAPTEC

1542CF, ISA	$165
2842 VESA	$249
2742 EISA	$309
2940 PCI	$235

FUTURE DOMAIN

1670 ISA	$85

SUNJAK

7HD/2FD/IDE&IO All-In-One	$85

SUPER VGA MONITORS

SIZE	MAKE/MODEL	PRICE
14"	CTX	$245
17"	CTX	$599

TAPE DRIVES

CAPACITY	MAKE/INTERFACE	INT/EXT
250 MB	WangDat/Archive SCSI	$400/500
525 MB	WangDat/Archive SCSI	$495/595
2GB	WangDat/Archive SCSI	$750/850
4GB	WangDat/Archive SCSI	$850/950
8GB	WangDat/Archive SCSI	$950/1050

HDD
RUN OUT OF CAPACITY?
NO INSTALLATION!
EXTERNAL HI-SPEED
SUBSYSTEM

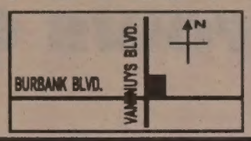
- GOVERNMENT & CORPORATE PO'S ARE ACCEPTED
- NO SURCHARGE FOR CREDIT CARDS
- SAME DAY SHIPPING ON MOST ORDERS
- RETURNS NEED TO HAVE RMA #'S
- SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE

VISA MasterCard

ALCOM SYSTEMS

5634 Van Nuys Blvd.
Van Nuys, CA 91401

TEL: (818) 989-9182
FAX: (818) 989-2371
Mon-Fri 9-5:30
Sat 10-5



NEW

486 SOUNDBOOK

* Built-in 16-bit sound card, microphone & speaker *

Specification:
4MB RAM exp. to 20MB
1.44MB FD, 260 MB HD
32-bit VL-Bus Video, 10.3" Display
PCMCIA slots (2 type II or 1 type III)
NiMH battery, Built-in Trackball
Advanced power management
Parallel, serial, KB & ext SVGA
Carrying Bag, Weight: 6.5 lbs

Dual Scan Color

SX-33	$1899
DX2-66	$1999
DX4-100	$2359
Pentium-90	$CALL

Mono & Active TFT - $CALL

Sale of the year

Multimedia PENTIUM-90

* INTEL PENTIUM-90 MHz CPU
* 256K Cache on board
* 16 MB RAM expandable to 128 MB
* TEAC 1.44 MB floppy drive
* 1.275 GB IDE hard drive (10ms)
* Sound Blaster 16 & 140W HI-FI speakers
* 4X QUAD-SPEED CD-ROM DRIVE
* ENCHANCED PCI hard drive controller
* STEALTH 64 PCI w/2 MB
* 64-bit graphic accelerator, 16.7M color
* 15" SVGA non-interlaced monitor, .28 dp
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Medium tower case w/230 Watt p.s.
* EXTRA CPU FAN for your protection
* High resolution mouse

Special $2849

Multimedia 486DX2-66

* 80486DX2-66 MHz with INTEL CPU
* 256K cache on board
* 3 VESA STANDARD LOCAL BUS slots
* 8 MB memory (70ns)
* TEAC 1.44 MB floppy drive
* 420 MB IDE hard drive
* 16-bit sound card & 100W HI-FI speakers
* Double-speed CD-ROM drive
* 32-bit IDE hard drive controller
* 32-bit VL-BUS accelerator card w/1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 WATER-RESIST keyboard
* Medium tower case w/ 230 Watt p.s.
* EXTRA CPU FAN for your protection
* High resolution mouse

Best Buy $1369

Peripherals

3 Button Serial Mouse	$ 12
Microsoft New Mouse	$ 35
Trackball Mouse	$ 20
14.4 Internal FAX/Modem	$ 69
28.8 Internal FAX/Modem V.34	$179
MAG 15" SVGA NI,Digital monitor	$329
MAG 17" SVGA NI,Digital monitor	$599
Optiquest 2000DS 15" Digital Monitor	$349
Optiquest 2000DC 15" Digital Monitor	$389
Optiquest 4000DC 17" Digital Monitor	$659
Diamond Stealth 64 VLB w/2MB	$189
Diamond Stealth 64 PCI w/2MB	$189
ATI Mach 64 VLB w/2MB	$199
ATI Mach 64 PCI w/2MB	$199
Conner 250MB tape drive & tape	$139
Conner 420MB tape drive & tape	$179
Colorado 250MB tape drive	$149
Colorado 350MB internal tape drive	$179
Mini-speakers (pair)	$ 8
40 Watt Power speakers (pair)	$ 30
Deluxe 140 Watt HI-FI speakers (pair)	$ 60

PCI PENTIUM-90 MHz

* INTEL PENTIUM-90 MHz CPU
* TRUE 64-BIT CPU-MEMORY-CACHE PATH
* 256K Cache on board
* 8 MB RAM expandable to 128 MB
* TEAC 1.44 MB floppy drive
* 540 MB IDE hard drive
* Enchanced PCI hard drive controller
* DIAMOND STEALTH 64 PCI w/1 MB
* 64-bit graphic accelerator, 16.7M color
* 15" SVGA non-interlaced monitor, .28 dp
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Medium tower case w/230 Watt p.s.
* EXTRA CPU FAN for your protection
* High resolution mouse

$1899

PCI PENTIUM-66/60 MHz

* INTEL PENTIUM-66/60 MHz CPU
* TRUE 64-BIT CPU-MEMORY-CACHE PATH
* 256K Cache on board
* 8 MB RAM expandable to 128 MB
* TEAC 1.44 MB floppy drive
* 540 MB IDE hard drive
* Enchanced PCI hard drive controller
* DIAMOND STEALTH 64 PCI w/1 MB
* 64-bit graphic accelerator, 16.7M color
* 15" SVGA non-interlaced monitor, .28 dp
* Flat screen, Digital control, Low-radiation
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Medium tower case w/230 Watt p.s.
* EXTRA CPU FAN for your protection
* High resolution mouse

$1699/1669

486DX2-66/DX-33 MHz

* 80486DX2-66/DX-33 MHz with INTEL CPU
* PENTIUM OVERDRIVE (P24T) READY
* 256K cache on board, ZIF socket
* 3 VESA STANDARD LOCAL BUS slots
* 4 MB RAM expandable to 128 MB
* TEAC 1.44 MB floppy drive
* 420 MB IDE hard drive
* 32 bit IDE hard drive controller
* 32 bit VL-BUS accelerator card w/ 1 MB
* 14" SVGA monitor, .28 dp, Edge to Edge
* VESA standard, NON-INTERLACED display
* 2 serial, parallel, & game ports
* Enhanced 101 key keyboard
* Mini tower case w/230W p.s.
* EXTRA CPU FAN for DX2-66
* High resolution mouse

$1029/949

QUALITY & SERVICE YOU CAN COUNT ON

All name brand & quality components
All systems are fully tested & burned-in for 72 hours
Free lifetime technical support
Free upgrade at no extra labor charge
Friendly customer service

One year parts & labor warranty

30 Days Money Back Guarantee
20% restocking fee on non-defective parts

On-site Service, Delivery & Setup, Training
Extended Warranty
Available

Prices & specifications subject to change without notice.
Not responsible for typographical errors.
Prices reflect COD cash purchase.
Please add 3% for credit card purchase.

Multimedia Forum

Package #1 Only $429
* Sound Blaster 16 SCSI-2 sound board
* TOSHIBA Quad-Speed SCSI CD-ROM drive
(Transfer rate: 600KB/sec. Access: 150ms)

Package #2 Only $319
* Sound Blaster 16 sound board
* TEAC Quad-speed CD-ROM drive
(Transfer rate: 600KB/sec. Access: 195ms)

Package #3 Only $299
* Acer Magic 16 sound board
* MITSUMI Quad-speed CD-ROM drive
(Transfer rate: 600KB/sec. Access: 195ms)

Package #4 Only $199
* Sound Easy Pro 16 MCD sound board
* PANASONIC Double-speed CD-ROM drive
(Transfer rate: 300KB/sec. Access: 320ms)

Optional 6 CD Software Titles:
- New Grolier Encyclopedia 1994
- World Atlas w/movies (MPC)
- U.S. Atlas w/movies (MPC)
- Chessmaster 4000 Turbo
- The San Diego Zoo Animals
- Mavis Beacon Teaching Typing

Only $40

FREE 40W Hi-Fi Speakers

Optional Microsoft Home Software Titles:
- ENCARTA 95'
- Works for Windows 3.0 (MPC)
- Money 3.0
- Entertainment Packs (13 games)

Only $70

DVORAK'S LAST COLUMN • BY JOHN C. DVORAK

The Darts And Arrows Column Or What Went Wrong In 1994 (Highlights)

1994 was the year of the weird, highlighted by the Pentium fiasco at the very end of the year. The Pentium fiasco drew attention away from a dubious year indeed.

Here are some highlights of 1994 we all conveniently forgot.

Merger And Dealmaking Mania

We can start with the ludicrous buyout of Intuit by Microsoft. A billion-dollar software company gobbling up another billion-dollar software company. Is everyone in the US Government asleep at the switch regarding these anticompetitive deals?

What's really ludicrous is Microsoft's assertion that it is not being anticompetitive because as part of the deal it will give Novell its own product, Microsoft Money.

So here's how it works: You buy out the competitor who is killing your product sales. You give your product to another competitor and suddenly become number one with the product you were originally competing with. You drive the other product, Microsoft Money, off the market (as they will) and say, "Gee, this wasn't anticompetitive, was it?" The dumfux in the government antitrust office say, "Duh, I guess not."

Give me a break! Weren't the Democrats elected in 1992 to stop nonsense like this? No wonder they got thrown out.

The Delrina Debacle

While there are a lot of things that need fixing in the newest release of Delrina's WinFax products, the marketing could really use a tune-up. Here's a typical complaint:

Saw this package at Comdex and was pretty impressed. Got a copy in the mail today. Skimming through the manuals I find out they've got a deadman switch built into the program. If you don't let it register you by modem (and who knows what information it's taking off your PC) it will only run 15 times—then nothing. You have to call up and get a code to unlock it.

I know these guys are from Canada, but are they totally clueless? After paying American dollars for the product, the user is now held hostage until he calls up and tells them anything they want to know? I think you should blast them. And offer $20 and an autographed picture to the first guy who sends you a patch to disable this nonsense. I won't load the stuff, let alone use it now.

I Knew Editors Were Crazy Dept.

Let's not forget last year's Editor of the Year. Scotland Yard arrested an unnamed Editor for hacking a computer system and sending bogus memos, most of which were derogatory, towards upper management. Authorities are going to prosecute this poor guy for doing what he had to do.

Confess Your Sins!

And I assume we heard about the introduction on the WWW of a virtual confessional for all the guilt-ridden out there:
http://anther.learning.cs.cmu.edu/priest.html
What next?

Overlooked Tragedy

The biggest news of 1994 was the unfortunate death of Gary Kildall, industry pioneer, in a California bar. There was a fuss for a few weeks; then suddenly the poor man is totally forgotten as we talk about delays in Windows '95. Also, there were supposed to be odd circumstances concerning the death.

But that was in July, and since then we've heard bupkis, zip, nada. Are we pathetic or what? There wouldn't be a personal computer scene if it wasn't for Gary.

Who's Watching The Store Dept.

Just as we go towards digital video, we read about how the greedy bastards in Hollywood want to muck up the whole technology with all sorts of copy protection like they did with digital audio. Here's a press release (edited) that tells all.

Macrovision Corp. today announced that it would make available a number of its proprietary copy protection technologies for inclusion in digital VCRs, digital video disc players, and digital TVs at no charge to hardware manufacturers. Macrovision expects its new IPPS™ (Intellectual Property Protection System) solution will drive widespread adoption of a new digital VCR and MPEG-2 digital video disc industry standard. If adopted by the industry, Macrovision's IPPS technology would:

1. Prevent digital VCRs from making analog or digital copies of Macrovision copy-protected VHS and 8mm tapes and pay-per-view programs.

2. Prevent digital VCRs from making analog or digital copies of IPPS programs released on digital videocassettes.

3. Prevent to the same extent as Macrovision's current pay-per-view anticopy technology the majority of existing analog VHS VCRs from making copies of IPPS programs released on digital videocassettes or MPEG-2 digital video discs.

4. Incent all digital VCR manufacturers to adopt the IPPS copy protection standard, because noncompliant digital VCRs which do not incorporate the complete IPPS technology could not play IPPS digital videocassettes.

I have no sympathy for it. There is nothing done to protect my intellectual property rights regard photocopying my column! Why do these guys feel so privileged that they have to muck up good technologies with this garbage?

You know it will end up turning the technology into a niche product like DAT became. If writers were of the same mind as these Hollywood types we'd have no such thing as a photocopying machine. Since the release of VCRs, moviemakers have never had it so good, and all they are concerned about is getting ripped off.

Get a clue! All we will get out of this is picture degradation, just like what scrambled satellite broadcasts have brought us. Exactly how you ruin a digital signal is beyond me, but they will do it. Obviously if you can't make an analog recording from even the RF out of the recorder, then the signal is screwed up. But then again, so is that business.

Have a great 1995. ■

Since the release of VCRs, moviemakers have never had it so good, and all they are concerned about is getting ripped off.

Get a clue!

HEWLETT PACKARD PRINTERS

DeskJet 320 Portable Printer

- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Compact, portable design fits neatly into a briefcase
- Easy-to-add color with an optional HP Color kit (sold separately) just snap in the cartridge and print

#1952331

$297

DeskJet 540 InkJet Printer

- Crisper, blacker blacks with 600 x 300 dpi printing plus HP's Resolution Enhancement Technology
- Easy-to-add color with an optional HP Color kit-just snap in the cartridge and print (Color Kit Sold Separately)
- Easily handles a wide variety of paper sizes

#1952342

$277

LaserJet 4P

True 600 x 600 dpi printing for four times the Resolution of conventional 300dpi printers • HP Microfine toner and Resolution Enhancement Technology for smoother, sharper graphics • Uses 50-70% less energy than comparable laser printers in Powersave mode • Prints on a wide range of paper sizes and types including mailing labels, postcards, envelopes and index cards • Enhanced HP PCL 5 for seamless compatibility with the HP LaserJet 4 printer,45 built-in scalable typefaces,2MB standard memory expandable to 26MB.

#1842050

$919

LaserJet 4 Plus

The BEST print quality in the industry

- 12 pages per minute engine an 25MHz RISC processor for faster printing
- True 600 dpi print quality for clear, crisp text and graphics
- Resolution Enhancement Technology and microfine toner for superior output quality
- Easy to set up and use
- Duplex option (sold separately)

#1908697

$1369

DeskJet 1200C

- 600 x 300 dpi black text at up to 7 pages per minute produces high-quality output at business speed.
- 300 dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color saves money and allows convenient use of common office paper stationary.
- Built-in high-speed Centronics interface and optional HP JetDirect cards provide powerful, flexible connectivity.

#1786974

$999.99

LaserJet 4M Plus

The BEST print quality in the industry

12 pages per minute printing for Macintosh and mixed Mac/Pc environments • True 600 dpi output • AdobeTM PostScriptTM Level 2 and enhanced HP PCL 5 printer languages. • 80 scalable typefaces - 35 Adobe Type1, 35 Intellifont, 10 TrueTypeTM 6MB standard, expandable up to 38MB • 250 sheet paper tray and 10-envelope multipurpose tray.

#1914571

$1899

LaserJet 4Si

- Expandable and flexible, excellent for networks
- Fastest HP LaserJet printer at 17 ppm
- Multiple language capability with auto switching
- True 600 x 600 dpi printing with REt and microfine toner
- 75,000 page/ month duty cycle and flexible paper-handling
- HP quality and reliability

#1779583

$2899

LaserJet 4V

- HP's fastest desktop printer
- Crisp 600 x 600 dpi print quality
- 16-ppm engine speed
- 33Mhz RISCprocessor with I/O buffering for unparalled performance.
- Handles a wide range of paper sizes including 11 x 17.

#1952320

$1889

Canon PRINTERS

Canon BUBBLE JET 200e PERSONAL DESKTOP PRINTER

- 360 dpi for Laser-Quality Graphics and Text
- Printing Speed Rivals 4 ppm Lasers
- 100 Sheets or 15 Envelopes
- EPA Energy Star Compliant
- 2 Year Limited Warranty

#1879090

$229

Canon BJ-230 DESKTOP PRINTER

- Handles all your essential business printing needs.
- Including large formats, up to 11" X 17"
- Laser quality printing at 360 X 360 dpi.
- Laser quality, without laser price.
- For faster printing, supports bi-directional graphs.
- The BJ-230 rivals the speed of a 4 ppm laser printers.
- Compact size save space in a small office setting.
- Gives all your business documents a professional look.

#1805305

$389

Canon BJC-4000 PRINTER

- Superior Laser Monochrome Resolution: 720 x 360 dpi with Smoothing
- As fast as a Laser: 5ppm
- Brilliant, Vibrant Full Color: 360 x 360 DPI
- Supports up to 16.7 Million Colors
- 2-Year Limited Warranty

#1949689

$399

Canon BJC-600e COLOR BUBBLE JET PRINTER

- 720 x 360 dpi
- Automatically Feeds 100 Sheets, 50 Transparencies or 15 Envelopes
- 20 TrueType Fonts Included!
- Lowest Operating Cost
- 15-Hour Toll Free Support

#1975709

$499

Canon BJC-600 PERSONAL COLOR PRINTER

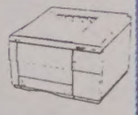
- Prints 360 DPI on plain paper for brilliant color quality.
- 100 Sheet automatic feeder for easy paper handling
- Easily handles letter and legal size paper, also envelopes and back print film.

Remanufactured to factory specifications

#1951237

$368

Canon LBP-1260 12 PPM LASER PRINTER



- Fast, High Volume Printing
- Provides Superior Print Quality
- high Resolution 600 dpi Printing and Superfine Toner
- Grows with Your Needs
- 250 Sheet Standard paper Tray; Supports up to 850 Sheets and 75 Envelopes with Options
- 15-Hour Toll Free Support
- Free 2-Year Instant Exchange Warranty

#1975905

$1345

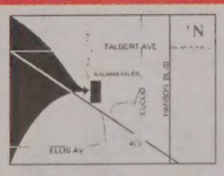
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

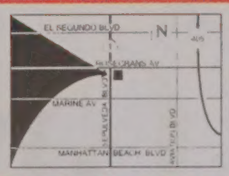
Prices Good Through January 31, 1995

Limit Rights Reserved. Not responsible for typographical errors.

STORE HOURS
MONDAY -FRIDAY
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM



Fountain Valley
10800 Kalama River Ave.
(714) 378-4400
CORP. P.O. FAX (714) 378-4444



Manhattan Beach
3600 Sepulveda Blvd.
(310) 364-FRYS (3797)
CORP. P.O. FAX (310) 364-3700

DISCOVER, VISA AND MASTERCARD ACCEPTED.

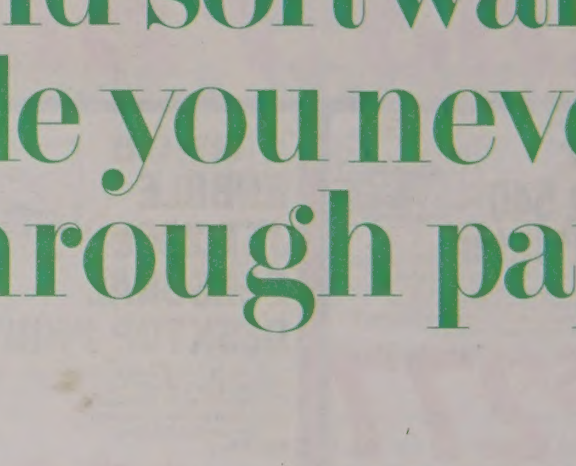
You've just waded through hundreds of pages of paper to finally find software that will enable you never to have to wade through paper again!

Green Computing and Document Imaging
At last... a paper-reducing, full featured personal document imaging system for only $99 — GreenDesk for Windows™. Integrate your computer-based and paper-based information from a single "green" desktop and cabinet– a revolutionary breakthrough in personal productivity software for SmallOffice/Home Office systems and professional users.

Compound Folders®
Cross-application "compound folders" manage all your information just like a paper-based file cabinet–only "greener" and smarter. GreenDesk delivers "long file name" capability today and search "across your applications"– a time saver and productivity booster.

Electronic File Cabinet
Manage and compress (up to 45:1) your PC-based faxes, control your scanner, and store any data, (including multimedia video and sound) for instant access.

- Faxes & scanned paper images
- Video/multimedia clips
- Voice mail & sound clips
- Integrates all your data "Across Applications"


GreenDesk for Windows
Desktop Cabinet InOutBox SmartTab Image OCR Options Window Help
Tools
SmartLauncher
Sound Recorder - BARRET-2.WAV
Stack ID: Keyword Description: Date: Time: # Pages: Source:
Letter sent to Attorney Oct 04 1994 12:27:46 1 NATIVE
Product Information Oct 04 1994 15:08:48 2 SCANNER
Contracts Oct 04 1994 12:14:10 3 FAX
Important fax from Seattle's me Oct 04 1994 12:14:34 3 FAX
Urgent!!! Oct 04 1994 12:14:58 2 FAX
New... Browse... Delete Tab It Close Help
Ready Zoom

OCR / Document "Recycling"
Go PaperFree. Recycle your incoming faxes and scanned paper documents into editable text for your favorite word processor with our ultra-accurate Optical Character Recognition engine.

Customizable Database / PIM
Use our SmartTabs database as a stand-alone, fully customizable Personal Information Manager, or as a powerful search engine to "tab" all your GreenDesk-managed documents. Also supports keyword and Boolean search across the entire cabinet.

Program Launch / Desktop Management
Just click on any document (or Windows "object") stored in our GreenDesk cabinet– our SmartLauncher finds the file and launches the "native" Windows applications automatically. Move beyond Windows "file manager" to a seamless "office environment" of your favorite programs and often-accessed documents.

SmartImager Corporation, 5137 Clareton Drive, Suite 200
Agoura Hills, CA. 91301-4526. FAX: (818) 597-1342.

GreenDesk® $99 For Windows

The PaperFree® Office Environment For The Environment. From SmartImager. 1-800-588-DESK.